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Elevadas taxas de diversificação e presença de sinal filogenético reforçam a influência do habitat terrestre na dinâmica evolutiva do filo Ciliophora

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Dissertação apresentada ao Programa de Pós-Graduação em Biodiversidade e Conservação da Natureza da Universidade Federal de Juiz de Fora como requisito parcial à obtenção do título de Mestre em Biodiversidade e Conservação da Natureza. Área de concentração: Comportamento, Ecologia e Sistemática.

Aprovada em 19 de março de 2024.

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“As misericórdias do senhor são a causa de não sermos consumidos, porque as suas misericórdias não têm fim; renovam-se a cada manhã. Grande é a tua fidelidade.” (Lamentações 3.22-23)

RESUMO

Os protistas ciliados são distribuídos mundialmente, e podem ser encontrados em diversos habitats tais como rios, lagos e regiões marinhas, mas é no ambiente terrestre, solos e associados a musgos, com suas características específicas e dinâmicas ao longo do tempo, onde adaptações à vida terrestre são encontradas. Contudo, até o momento, são escassos os estudos evolutivos, principalmente os relacionados a evolução de características ecológicas como os habitats, para o filo Ciliophora. No presente estudo, nós inferimos uma ampla filogenia molecular datada, com base no gene 18S-rDNA, para todo o filo Ciliophora, o qual permitiu realizar um mapeamento do hábito de vida ao longo do tempo de evolução do grupo e avaliar se os diferentes habitats em que os ciliados se encontram estavam associadas à variação de taxas de diversificação e ao modo de evolução em Ciliophora. Nossos resultados recuperaram que o último ancestral comum do filo Ciliophora ocupava um ambiente similar aos habitats marinhos/salobros atuais, e que o ambientes terrestres foram ocupados de forma independente e inúmeras vezes durante a evolução do grupo. Pela primeira vez utilizando dados moleculares e estatísticos, registramos duas rotas possíveis para o alcance ao ambiente terrestre: (i) através de um ancestral marinho, rota mais frequente com três pontos de transições, e (ii) a partir de um ancestral de água doce, com apenas um registro de transição. Além disso, encontramos um sinal filogenético robusto que reforça a influência dos habitats na evolução do grupo, e um aumento significativo das taxas de diversificação dos ciliados terrestres e simbiontes, quando comparados aos que exploram habitats marinhos e de água doce. Notamos também uma forte influência dos ciliados terrestres nas taxas evolutivas das suas respectivas classes, principalmente, nas classes Colpodea, Litostomatea, Spirotrichea.

Palavras-chave: Ciliophora; ciliados de solo; macroevolução; habitat; taxas de diversificação.

ABSTRACT

Ciliated protists are distributed worldwide, and can be found in different habitats, such as rivers, lakes and marine regions, but it is in the terrestrial environment, soils and those associated with mosses, with their specific and dynamic characteristics over time, where adaptations to terrestrial life are discovered. However, to date, evolutionary studies are scarce, especially those related to the evolution of ecological characteristics such as habitats, for the phylum Ciliophora. In the present study, we inferred a broad dated molecular phylogeny, based on the 18S-rDNA gene, for the entire phylum Ciliophora, which allowed us to map the life habit throughout the group's evolution and evaluate whether the different habitats in the ciliates are associated with variation in diversification rates and the mode of evolution in Ciliophora. Our results recovered that the last common ancestor of the phylum Ciliophora occupied an environment similar to the current marine/brackish habitats, and that terrestrial environments were occupied independently and numerous times during the group's evolution. For the first time using molecular and statistical data, we recorded two possible routes to reach the terrestrial environment: (i) through a marine ancestor, the most frequent route with three transition points, and (ii) from a freshwater ancestor, with just a transition record. Furthermore, we found a robust phylogenetic signal that reinforces the influence of habitats on the evolution of the group, and a significant increase in the diversification rates of terrestrial ciliates and symbionts, when compared to those that explore marine and freshwater habitats. We also noticed a strong influence of terrestrial ciliates on the evolutionary rates of their respective classes, mainly in the classes Colpodea, Litostomatea, Spirotrichea.

Keywords: Ciliophora; soil ciliates; macroevolution; habitat, diversification rates.

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INTRODUÇÃO GERAL

O filo Ciliophora Doflein, 1901 é formado por organismos denominados de ciliados, um grupo que engloba seres eucariontes, heterotróficos e unicelulares. Esses indivíduos compartilham três características sinapomórficas: dimorfismo nuclear (micronúcleo e macronúcleo), reprodução sexuada por conjugação (quando presente) e corpo coberto por uma complexa estrutura formada por cílios, a infraciliatura (LYNN, 2008; ADL et al., 2019). Esses indivíduos são muito diversos e, até o momento, já foram descritas 8000 espécies de ciliados, e sua classificação é dada pelo sub-filo Postciliodesmatophora, que compreende as classes Karyorelictea e Heterotrichea, e pelo sub-filo Intramacronucleata, onde estão contidas as classes Spirotrichea, Armophorea, Litostomatea, Colpodea, Oligohymenophorea, Nassophorea, Phyllopharyngea, Plagiopylea, Prostomatea, Protocruzia, Odontostomatea e, mais recentemente, Muranotrichea e Parablepharismaea, totalizando 15 classes (GAO et al., 2016; FERNANDES, 2018).

Os ciliados são distribuídos mundialmente e ocorrem em praticamente todos os tipos de ambientes, sendo eles, água doce, marinho, salobro e terrestre, ou em associações simbióticas (BAMFORTH, 1981; DE PUYTORAC, 1994; LYNN, 2008). A presença dos ciliados em praticamente todos os lugares do planeta tem influência direta em sua admirável tolerância ou adaptabilidade às adversidades apresentadas pela natureza em seus ambientes (NOLAND, 1925; SLEIGH, 1988).

No ambiente terrestre, os ciliados são componentes essenciais na mineralização dos nutrientes do solo, pois ao predarem as bactérias, liberam para o meio o nitrogênio que antes estava preso na biomassa bacteriana, deixando assim esse nutriente disponível para as plantas e outros organismos daquele ambiente (CLARHOLM, 1985; GRIFFITHS, 1986; BONKOWSKI & CLARHOLM, 2012). Contudo, para esses organismos, as variadas condições físicas e químicas desse ambiente podem se tornar bem adversas. FENCHEL (1987) citou três fatores que são importantes para protozoários terrestres: dimensão dos poros do solo, escassez de água, e a flutuação temporal de umidade. Além destes, BAMFORTH (1980) comenta também da influência da temperatura no microambiente onde os ciliados vivem.

Na literatura, as principais classes do filo Ciliophora possuindo representantes no ambiente terrestre são Colpodea, Litostomatea e Spirotrichea (FENCHEL, 1987; FOISSNER, 1993; FOISSNER, 1998). E uma das características que ciliados de solo apresentam é o

tamanho reduzido, sendo geralmente menor e mais fino do que ciliados de água doce ou marinho (FOISSNER, 1987; FOISSNER, 1998). Além disso, algumas outras espécies apresentam também o corpo mais flexível devido ao formato alongado ou vermiforme (FOISSNER, 1998; FOISSNER et al., 2002; FOISSNER & XU, 2007; VĎAČNÝ & FOISSNER, 2008; BERGER, 2011). Essas se devem à adaptação a vida nas fendas estreitas e poros do solo, já que o espaço disponível entre o solo e suas partículas é restrito (FENCHEL, 1987; FOISSNER, 1987; FOISSNER, 1998). Uma outra característica dos ciliados terrestres é a estratégia r/K, que é relacionada com o tipo de ambiente em que o ciliado se encontra, e como irão explorar os recursos deste ambiente. Os estrategistas r são aqueles que possuem uma tolerância maior em relação às alterações ambientais, já os estrategistas K aqueles que exercem melhor suas funções ecológicas em um ambiente mais estável (LÜFTENEGGER et al., 1985; BAMFORTH, 1995; BAMFORTH et al., 2005). Uma terceira característica dos ciliados, evoluída para proteção contra condições ambientais desfavoráveis, é a formação de cistos (GUTIÉRREZ et al., 2001; VERNI & ROSATI, 2011). Desde temperaturas altas e dessecação, falta de alimento e até mesmo superpopulação, esses estágios de dormência são utilizados nessas condições ambientais para proteção dos organismos (CORLISS & ESSER, 1974; GUTIÉRREZ et al., 2001; EKELUND et al., 2002; WEISSE, 2004; VERNI & ROSATI 2011). E devido a essas condições também estarem presentes no ambiente terrestre, observa-se muito frequentemente ciliados no solo que eclodiram de formas císticas (FOISSNER, 1987; FOISSNER, 1998; FOISSNER et al., 2002; FOISSNER, 2016). Além dos cistos de resistência, alguns autores mostram a existência dos chamados cistos de reprodução, onde em um meio muito competitivo, os ciliados deixam de reproduzir para conseguirem obter uma maior quantidade de alimento, e, posteriormente, formam cistos onde ocorrem a reprodução (FENCHEL, 1987; CORLISS, 2001; LYNN, 2008).

Dentro os estudos macroevolutivos que investigaram os ambientes colonizados pelos ciliados no planeta, poucos trabalhos inferiram por meio do estado ancestral do habitat as transições entre os diversos ambientes ocupados por ciliados. DUNTHORN et al. (2014), por exemplo, inferiram a partir das regiões V4 e V9 do gene 18S-DNA qual seria o habitat ancestral de ciliados pertencentes à classe Colpodea. SUN et al. (2016) realizaram uma análise filogenética robusta dos Peritrichia e determinaram o estado ancestral para o grupo a partir de diversos habitats. Contudo, até o momento, não existem trabalhos que utilizam técnicas moleculares modernas a fim de mapear a influência do ambiente (solo, água doce, marinho/salobre e simbioses) na evolução do filo Ciliophora como um todo.

OBJETIVOS

Deste modo, o presente estudo objetivou investigar os aspectos macroevolutivos relacionados aos ciliados terrestres, estimando o tempo e as diferentes rotas evolutivas para a sua chegada a esse habitat, e explorar a relação do sinal filogenético com os diferentes habitats alcançados durante a evolução de Ciliophora.

Objetivos específicos

- (1) Estimar e mapear os habitats de Ciliophora ao longo do tempo evolutivo do grupo.
- (2) Estimar o sinal filogenético relacionado ao habitat.
- (3) Avaliar a associação do ambiente terrestre às taxas de diversificação e ao modo de evolução do filo Ciliophora.

CAPÍTULO ÚNICO

Elevadas taxas de diversificação e presença de sinal filogenético reforçam a influência do habitat terrestre na dinâmica evolutiva do filo Ciliophora

(Artigo submetido ao periódico “European Journal of Soil Biology”, FI: 4.2, Qualis A1)

RESUMO

Os ciliados apresentam distribuição mundial e são encontrados em diversos habitats, dentre eles os ambientes terrestres, como organismos de hábito simbiótico ou de vida livre. Os ambientes terrestres apresentam um conjunto de características específicas e dinâmicas, que selecionam adaptações necessárias para a sobrevivência dos organismos que exploram esses habitats. Entretanto são escassos os estudos macroevolutivos relacionados a evolução de características ecológicas, como os habitats, para o filo Ciliophora. Pensando nisso, inferimos uma ampla filogenia molecular datada, com base no gene 18S-rDNA, a qual permitiu realizar um mapeamento dos habitats ao longo do tempo de evolução do grupo, estimar o sinal filogenético relacionado ao habitat e avaliar se os ambientes terrestres estão associados à variação das taxas de diversificação e ao modo de evolução do filo. Nossos resultados mostram que o último ancestral comum do filo Ciliophora ocupava um ambiente similar aos habitats marinhos/salobros atuais, e que os ambientes terrestres foram ocupados de forma independente e inúmeras vezes durante a evolução do grupo. Pela primeira vez utilizando dados moleculares e estatísticos, registramos duas rotas possíveis para o alcance ao ambiente terrestre: (i) através de um ancestral marinho, rota mais frequente com três pontos de transições, e (ii) a partir de um ancestral de água doce, com apenas um registro de transição. Além disso, encontramos um sinal filogenético robusto que reforça a influência dos habitats na evolução do grupo, e um aumento significativo na taxa de diversificação dos ciliados terrestres, quando comparados aos ciliados que exploram outros habitats, principalmente aqueles encontrados nos ambientes marinhos e de água doce. Recuperamos também uma forte associação entre o aumento das taxas de diversificação das classes com registros de ciliados terrestres, Colpodea, Litostomatea e Spirotrichea, e as taxas de diversificação dos ciliados terrestres. Tais alterações nas taxas macroevolutivas refletem o sucesso evolutivo dos ciliados terrestres, que pode estar associado a inúmeros fatores, sejam eles morfológicos, fisiológicos ou comportamentais, incluindo a sua plasticidade morfológica, capacidade de formar cistos de repouso, bem como suas características de resistência, e a fenômenos evolutivos, como a radiação adaptativa.

Palavras-chave: Ciliophora, Colpodea, Litostomatea, ciliados terrestres, Spirotrichea, habitat.

1. INTRODUÇÃO

O filo Ciliophora Doflein, 1901 exibe uma notável diversidade morfológica, com cerca de 8.000 morfoespécies descritas (LYNN, 2008). Esses protozoários ciliados encontram-se distribuídos mundialmente, explorando praticamente todos os tipos de ambientes, com registros em habitats de água doce, marinhos, salobros e terrestres, como organismos de vida livre ou em associações simbióticas (LYNN, 2008; BAMFORTH, 1981; DE PUYTORAC, 1994). A presença dos ciliados nesses habitats destaca sua admirável tolerância e adaptabilidade às adversidades impostas pela natureza nos diferentes tipos de ambientes (NOLAND, 1925; SLEIGH, 1988).

Os habitats terrestres apresentam características intrínsecas e dinâmicas, que influenciam diretamente na sobrevivência e manutenção das comunidades de microrganismos que os habitam, como as flutuações da temperatura e umidade (FENCHEL, 1987). Em contrapartida, os ciliados demonstram uma ampla variedade de adaptações (FENCHEL, 1987), com mais de 600 espécies descrita em habitats terrestres, com registros em solos e musgos (FOISSNER, 1997, 1998). Em sua revisão, FENCHEL (1987) cita três fatores que são importantes para protozoários terrestres: dimensão dos poros do solo, escassez de água, e a flutuação temporal de umidade. Além destes fatores, BAMFORTH (1980) adiciona em sua discussão a influência da temperatura ambiental nas comunidades de ciliados. Diversas características se mostram importantes para a sobrevivência dos ciliados sob tais condições extremas do solo, como o tamanho reduzido, os ciliados terrestres geralmente são menores e mais fino do que ciliados de água doce ou marinho (FOISSNER, 1998,1997). E o corpo mais flexível devido ao formato alongado ou vermiforme (FOISSNER, 1998; FOISSNER et al., 2002; FOISSNER & XU, 2007; VĎAČNÝ & FOISSNER, 2008; BERGER, 2011). Essas características morfológicas se devem à adaptação a vida nas fendas estreitas e poros do solo, já que o espaço disponível entre o solo e suas partículas é restrito (FENCHEL, 1987; FOISSNER, 1987; FOISSNER, 1998).

Outra característica relevante é a estratégia r/K, que está relacionada com o tipo de ambiente em que os ciliados se encontram, e como irão explorar os recursos destes habitats. Os estrategistas r são aqueles que possuem uma tolerância maior em relação às alterações ambientais, já os estrategistas K aqueles que exercem melhor suas funções ecológicas em um ambiente mais estável (LÜFTENEGGER et al., 1985; BAMFORTH, 1995; BAMFORTH et al., 2005). Uma terceira característica presente nos ciliados terrestres é a formação de cistos

de repouso (GUTIÉRREZ et al., 2001; VERNI & ROSATI, 2011). Tal estágio de dormência é utilizado em condições ambientais extremas para proteção dos organismos (CORLISS & ESSER, 1974; GUTIÉRREZ et al., 2001; EKELUND et al., 2002; WEISSE, 2004; VERNI & ROSATI, 2011). No ambiente terrestre os cistos de repouso aumentam a resistência dos ciliados a altas temperaturas, dessecação, UV, falta de alimento e eventos de competição por superpopulação.

Encontramos registros de ciliados que habitam o ambiente terrestre em três dos principais clados do filo Ciliophora, sendo eles Colpodea, Litostomatea e Spirotrichea (FENCHEL, 1987; FOISSNER, 1993; FOISSNER, 1998). Contudo, grande parte dos trabalhos com foco nesses organismos são descritivos, baseados em dados morfologia, ecológico e/ou em caracterizações moleculares, e poucos buscam compreender os processos evolutivos relacionados a colonização e permanência dos ciliados nos ambientes terrestres. Sendo menor ainda o número de estudos que buscam entender os aspectos macroevolutivos relacionados a aquisição de um novo habitat e a diversificação dessas espécies. Estimativas pontuais sobre caracteres ambientais, tais como os processos de colonização e transições entre os diversos habitats ocupados pelos ciliados, foram estimados anteriormente por Dunthorn et al. (2014) e Sun et al. (2016), entretanto, ainda é inexistente uma avaliação geral para o filo. Dunthorn et al. (2014) inferiram a partir das regiões V4 e V9 do gene 18S-DNA qual seria o habitat ancestral de ciliados pertencentes à classe Colpodea. Enquanto Sun et al. (2016) estimaram uma filogenia robusta para a subclasse Peritrichia e determinou o modo de evolução dos habitats de água doce, salinos e hipersalinos no interior da subclasse.

Nos últimos anos, inúmeros estudos buscaram utilizar dados moleculares para compreender a relação entre a dinâmica temporal nas mudanças das taxas de diversificação das espécies e traços fenotípicos (STADLER, 2011; RABOSKY et al., 2013, 2014). E apesar dos ciliados serem considerados ótimos modelos microbianos para estimar taxas de diversificação dependente de características (VĎAČNÝ et al., 2017), poucos são os estudos que abordam os padrões macroevolutivos no interior do filo, bem como a influência de características ecológicas, como o habitat e os diferentes hábitos, para todo o grupo. VĎAČNÝ et al. (2017) estimou a influência de diferentes características morfológicas nas taxas de diversificação, especiação e extinção dos ciliados pertencentes a subclasse Rhyncostomatia. Fernandes e Schrago. (2019) foram os primeiros a propor análises macroevolutivas para todo o filo Ciliophora. Contudo, seus amplos achados não tornaram possível a associação das alterações encontradas nas taxas de diversificação e características

morfológicas gerais. Apesar de ser raro, alguns estudos buscaram avaliar a influência do desenvolvimento de relações simbióticas nas dinâmicas macroevolutivas das diferentes classes de Ciliophora (VĎAČNÝ et al., 2018, 2019; RATAJ & VĎAČNÝ, 2018; COSTA et al., 2021). Como podemos notar, ainda é ausente uma perspectiva geral sobre a influência dos diferentes habitats explorados pelos ciliados na dinâmica evolutiva do grupo e um mapeamento dessas características ao longo da sua evolução. Deste modo o presente estudo objetivou investigar os aspectos macroevolutivos relacionados aos ciliados terrestres, estimando o tempo e as diferentes rotas evolutivas para a sua chegada a esse habitat, e explorar a relação do sinal filogenético com os diferentes habitats alcançados durante a evolução de Ciliophora.

Nossas inferências evidenciam a ancestralidade marinha do filo, além das transições recentes para os ambientes de água doce, terrestre e para o hábito simbiote. Uma descoberta relevante foi a identificação de duas rotas evolutivas para o alcance dos ciliados aos ambientes terrestres, sendo a mais comum proveniente de um ancestral marinho, e a segunda originada a partir de um ancestral de água doce. Evidenciamos também, a presença de pontos de regressões para todos os ambientes, com ênfase na regressão ao ambiente marinho após a transição pelo ambiente terrestre. Nossa análise filogenética, combinada com dados sobre os habitats explorados pelos ciliados, também revelou um sinal filogenético robusto para esse traço ecológico. Além disso, constatamos que dentre os habitats analisados, as espécies de ciliados encontradas nos ambientes terrestres, assim como os simbiotes, apresentaram um aumento significativo nas taxas médias de diversificação, sugerindo uma vantagem evolutiva nesses cenários em comparação aos demais ambientes. Dentre as clados com registro de transições para o ambiente terrestre, ficou evidenciado que as taxas de diversificação dos ciliados que compõem as classes Colpodea, Spirotrichea e Litostomatea tiveram uma maior influência na taxa geral dos ciliados que habitam o ambiente terrestre.

2. MATERIAL E MÉTODOS

2.1. Reconstrução do habitat ancestral em Ciliophora

As análises de reconstrução do estado ancestral do habitat foram realizadas a partir da filogenia datada do gene 18S-rDNA proposta por COSTA et al. (2021), a qual apresenta uma ampla representatividade de táxons, com a inclusão de 1137 espécies e uma matriz de 1500

pb. Para realizar a reconstrução do estado ancestral do habitat em Ciliophora empregamos a função „ape“ do pacote Phytools (REVELL, 2012) no ambiente R v.4.0.2 (R CORE TEAM, 2020). O método „ace“ foi aplicado na função „ape“ para calcular os valores de verossimilhança do estado ancestral do habitat para os nós, utilizando apenas as informações dos ramos terminais. Os habitats atribuídos para cada ramo terminal foram: água doce, complexo marinho/salobra, terrestre e hábito simbiote.

A classificação dos habitats foi realizada com base em artigos específicos de registo das espécies (Tabela Suplementar S1). No caso das espécies encontradas em vários habitats, apenas um habitat, aquele com maior frequência de registros da linhagem foi selecionado para compor o ramo terminal. Para as espécies em que a busca bibliográfica não delimitava os habitats, mas fornecia dados relacionados à salinidade do ambiente em que foram encontradas, foi adotado o seguinte padrão: salinidades <1% foram considerados de água doce; enquanto salinidades >1% foram consideradas como pertencentes ao complexo marinho/salobra (Brasil, 2007). Para os epibiontes, foram considerados os habitats em que os basibiontes foram coletados. E em relação a categoria simbiote, foram designadas como tal as espécies de ciliados que vivem associados a outros organismos (comensais, mutualistas, parasitos facultativos e parasitos), levando em consideração a definição de simbiose como uma relação neutra, benéfica ou patogênica, e ainda de caráter obrigatório ou facultativo (DE BARY, 1879; LEUNG & POULIN, 2008). As espécies que não apresentavam informações disponíveis para o habitat também foram mantidas nas análises, sendo denominadas como informações não disponíveis.

2.2. Inferência de sinal filogenético em Ciliophora

O sinal filogenético foi estimado para avaliar se os diferentes habitats nos quais os ciliados são encontrados podem refletir a história evolutiva do grupo, ou seja, investigamos se as transições entre os habitats dentro do filo estão associadas ao modo de evolução dos ciliados. Para calcular o sinal filogenético utilizamos o índice λ de Pagel (PAGEL, 1999), amplamente recomendado como um dos algoritmos mais satisfatório (MÜNKEMÜLLER et al., 2012). Este índice permite incorporar dados ausentes, o que foi crucial para a nossa análise, uma vez que não tínhamos dados sobre o habitat de todas as espécies de ciliados. O índice λ de Pagel utiliza o método de máxima verossimilhança, com valores de λ variando de zero a um. Quando λ é igual a zero, não há sinal filogenético, enquanto valores de $\lambda > 0$ indicam a presença de sinal filogenético. Contudo, valores mais próximos de um indicam a presença de

um sinal filogenético mais forte [40]. Desta forma, o índice λ de Pagel foi calculado através do pacote Phytools (REVELL, 2012) na plataforma R (R CORE TEAM, 2020), utilizando as categorias de habitats: água doce, complexo marinho/salobra, terrestre e hábito simbiote.

2.3. Análises macroevolutivas das taxas de diversificação

Para a inferência das taxas de diversificação de Ciliophora ao longo do tempo, submetemos a filogenia datada disponível em COSTA et al. (2021) ao algoritmo BAMM (Bayesian analysis of macroevolutionary mixtures) (RABOSKY et al., 2013). O BAMM estima, ao longo da árvore datada, as transições dos dados evolutivos (“rate shift”) e o local onde ocorreram essas mudanças (“shift configuration”). Os “priors” foram obtidos usando a função `setBAMMpriors`, e para a leitura e interpretação dos dados, utilizamos o pacote `BAMMTools` (RABOSKY et al., 2014) na plataforma R v.4.0.2 (R Core Team, 2020). Foram executadas quatro cadeias MCMC por 10.000.000 gerações, coletadas/amostradas a cada 1.000 ciclos, e posteriormente foi descartado um “burn-in” de 50% das amostras. Nós adotamos 1.0 como valor esperado de shifts ao longo da árvore. A função `plotRateThroughTime` foi usada para inferir a taxa de diversificação ao longo do tempo. E para estimar a distribuição posterior das taxas de diversificação dos nós de cada habitat e de cada grupo taxonômico, foi usada a função `getcladerates`.

3. RESULTADOS

A análise de reconstrução do estado ancestral do habitat sugeriu que o último ancestral comum do filo Ciliophora provavelmente ocupava um ambiente com características semelhantes aos que classificamos atualmente como complexo marinho/salobra, e teria surgido durante o período Neoproterozóico, datado em aproximadamente 822.9 milhões de anos (Ma) (Figura 1). Além disso, estimamos que a ocupação dos demais habitats ocorreu de forma independente e em diferentes clados do filo (Figura 1). A primeira transição do complexo marinho/salobra aconteceu para o ambiente terrestre, durante o Permiano (295.4 Ma), e posteriormente para o hábito simbiote (294.7 Ma), e para os ambientes de água doce (273.6 Ma), sendo esse último o habitat mais recente a ser explorado pelos ciliados (Figura 1). Recuperamos cinco transições para o ambiente terrestre, originando-se em maior frequência a partir do complexo marinho/salobra, com registros nas classes Colpodea, Spirotrichea e

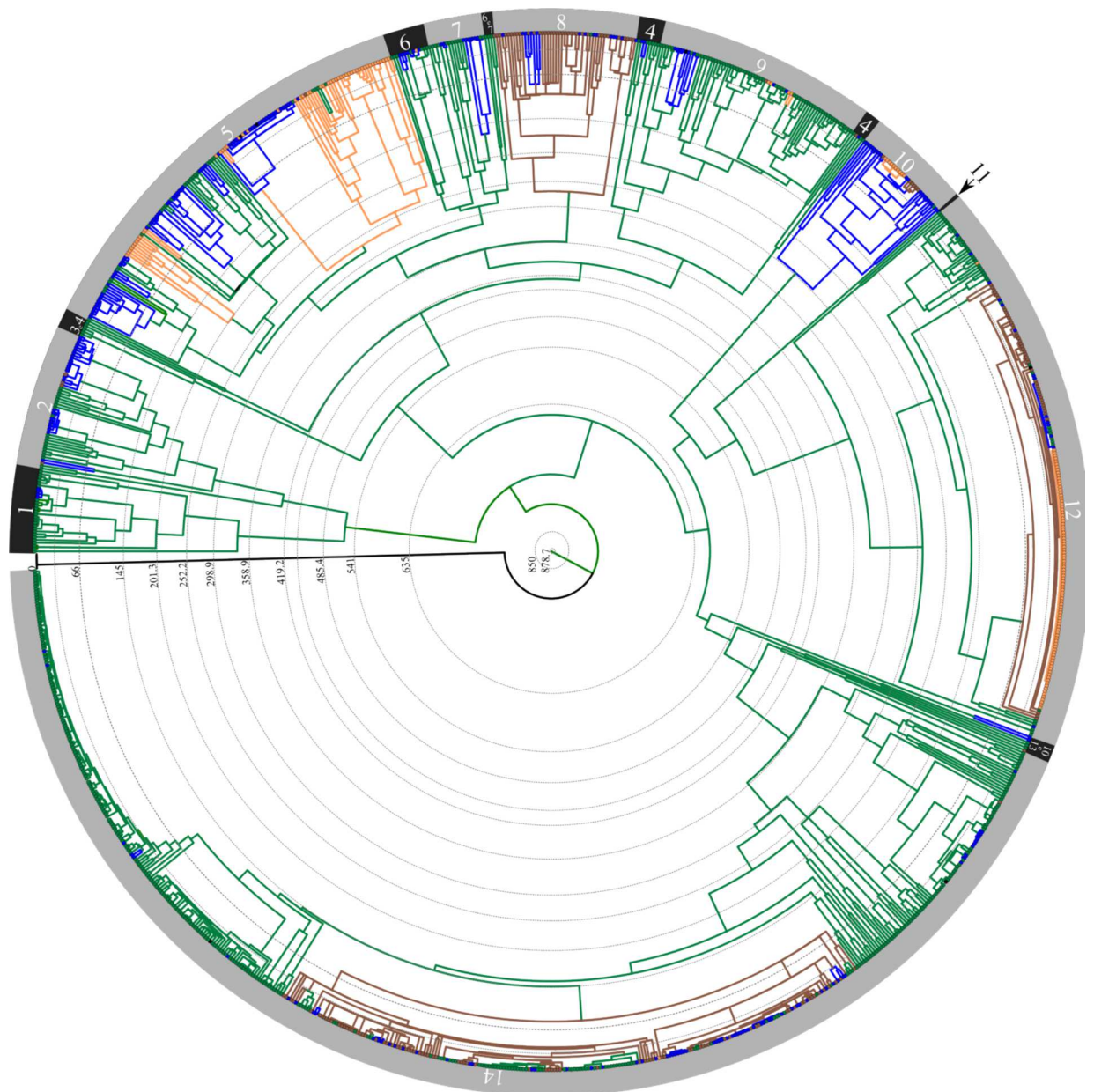
Litostomatea (Figura 1 e Tabela 1). A única transição para o ambiente terrestre a partir de um ancestral de ambiente de água doce ocorreu na classe Armophorea (Figura 1 e Tabela 1). Para o hábito simbiote, estabelecemos sete transições, sendo a de maior frequência oriunda de um ancestral pertencente ao complexo marinho/salobra, no interior das classes Oligohymenophorea e Phyllopharyngea. As transições para o hábito simbiote a partir de um ancestral de ambiente de água doce e de ambiente terrestre aconteceram nas classes Oligohymenophorea e Litostomatea, respectivamente (Figura 1 e Tabela 1). Já para o ambiente de água doce observamos 36 transições, com registro em todas as classes de ciliados e se originando de todos os demais ambientes, embora a maior frequência registrada seja a partir de ancestrais pertencentes ao complexo marinho/salobra (Figura 1 e Tabela 1). Além das transições, durante o processo de diversificação das linhagens foram registrados alguns pontos de regressões, que se trata de momentos em que os ciliados voltam a explorar um habitat que era previamente ocupado por seus ancestrais (Tabela 2). Tais regressões foram recuperadas para todos os habitats analisados (Tabela 2). Para os ciliados que habitam os ambientes do complexo marinho/salobra recuperamos nove regressões, das quais sete apresentam transição pelo ambiente terrestre, uma com transição pelo ambiente de água doce e uma a partir de ciliados com hábito simbiote (Figura 1 e Tabela 2). Para aqueles encontrados em ambientes terrestres recuperamos três regressões, com todas passando por um ancestral de habitat de água doce (Figura 1 e Tabela 2). Em relação aos ciliados de hábito simbiote, registramos apenas uma regressão, transitando pelo ambiente de água doce antes de retornar ao ambiente simbiote de origem (Figura 1 e Tabela 2). E por último, a regressão para o ambiente de água doce foi inferida duas vezes, com transição pelo ambiente terrestre (Figura 1 e Tabela 2).

Buscando investigar a ocorrência de sinal filogenético em relação aos diferentes tipos de habitat e sua associação com a história evolutiva do filo Ciliophora, mapeamos os dados de habitat disponíveis para as sequências moleculares de ciliados ao longo da filogenia mais recente do grupo. O índice de λ de Pagel evidenciou um sinal filogenético robusto, com valor de lambda de 0.877265 (p-value < 0.001) para os dados de habitat, sugerindo uma forte associação dessa característica ambiental ao longo da evolução do Filo Ciliophora.

A fim de melhorar o entendimento sobre a influência dos diferentes habitats ocupados pelos ciliados sob o cenário macroevolutivo do grupo, avaliamos também a dinâmica das suas taxas de diversificação. Nossas estimativas mostraram que os clados compostos por espécies que habitam os ambientes terrestres, assim como aqueles formados por ciliados simbiotes,

apresentam maiores valores médios de densidade marginal das taxas de diversificação, quando comparados com os clados compostos por ciliados de água doce e ambientes marinhos/salobra (Figura 2A). Além disso, registramos uma sobreposição na distribuição das taxas de diversificação para ambos os clados, com taxas macroevolutivas muito similares (Figura 2A). Quanto a variação das taxas de diversificação ao longo do tempo, notamos que independente do habitat explorado, os ciliados apresentam taxas médias constantes desde o surgimento até o presente, ponto onde ocorre um aumento exponencial em todas as taxas (Figura 2B). Contudo, os clados compostos por ciliados de hábito simbiote e os ciliados terrestres apresentaram altas taxas médias desde sua origem (Figura 2B). E para aqueles clados compostos por ciliados terrestres registramos ainda dois picos significativos entre 200 Ma e o presente (Figura 2B).

Além disso, ao comparar as taxas médias de diversificação para os clados das classes que apresentaram ao menos um registro de transição para o ambiente terrestre e a taxa média de todos os ciliados encontrados em ambientes terrestres, foi possível identificar alguns pontos de sobreposição. Esse achado sugere que a transição para o ambiente terrestre pode estar fortemente relacionada com o aumento das taxas médias de diversificação das classes Colpodea, Litostomatea e Spirotrichea. Para a classe Colpodea, encontramos uma coincidência entre a taxa média de diversificação no surgimento da classe e a taxa média de diversificação dos primeiros ciliados a ocuparem o ambiente terrestre, a qual ocorreu em 295.4 Ma (Figura 1 e Figura 3A). Para a classe Spirotrichea, registramos o alcance ao ambiente terrestre ocorrendo em torno de 90 Ma (Figura 1), período que coincide com um aumento significativo da taxa média de diversificação dos ciliados pertencentes a essa classe (Figura 3B). Além disso, registramos, no mesmo ponto temporal, uma sobreposição entre a taxa média da classe e a taxa média de diversificação de todos os ciliados terrestres (Figura 3B), com tal coincidência se mantendo até o presente, o que revela uma influência duradoura do ambiente terrestre no aumento da taxa média de diversificação da classe Spirotrichea (Figura 1 e Figura 3B). Em Litostomatea, os resultados sugerem que a ocupação do ambiente terrestre ocorreu em um período mais recente, por volta de 71.3 Ma (Figura 1). Nesse mesmo período houve um aumento contínuo da taxa média de diversificação para a classe Litostomatea. Além disso, encontramos uma coincidência entre as taxas médias dos ciliados terrestre e as taxas médias da classe por volta de 8.5 Ma (Figura 1 e Figura 3C).



Habitats
 ● Marine/Brackish ● Fresh water ● Terrestrial ● Symbiosis ● Not Available

- Classes**
- | | |
|----------------------|---------------------------------------|
| 1. Karyorelictea | 8. Colpodea |
| 2. Heterotrichea | 9. Phyllopharyngea |
| 3. Protocruzia | 10. Armophorea |
| 4. Nassophorea | 11. Odontostomatea |
| 5. Oligohymenophorea | 12. Listostomatea |
| 6. Plagiopylea | 13. Muranotrichea and Parablepharisma |
| 7. Prostomatea | 14. Spirotrichea |

Figura 1. Reconstrução de estado ancestral para o filo Ciliophora com todas as transições e regressões dos habitats. Os braços coloridos são o habitat mais provável dos ciliados dentro de sua história evolutiva. Os ramos verdes representam ciliados Marinhos/Salobros, os ramos azuis representam ciliados de água doce, ramos marrons ciliados terrestres e ramos laranja representam ciliados simbiotes. Os círculos nas pontas dos ramos representam o estado atual do habitat das espécies. Espécies cujo habitat não foi encontrado tem pontas pretas. Os números representam as 14 classes do filo Ciliophora.

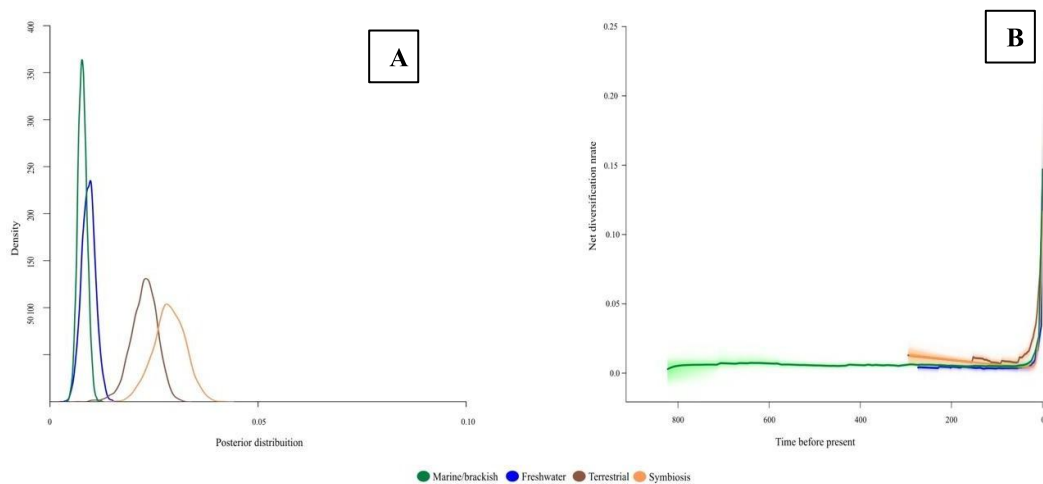


Figura 2. Dinâmicas das taxas de diversificação inferidas para o filo Ciliophora. (A) Histograma com taxas médias de diversificação calculadas para cada habitat. (B) Taxas de diversificação inferidas ao longo do tempo, comparando ramos pertencentes a cada habitat. Linhas verdes representam ciliados marinhos/salobros, linhas azuis representam ciliados de água doce, linhas marrons representam ciliados terrestres e linhas laranja representam os ciliados simbiotes. My: Milhões de anos.

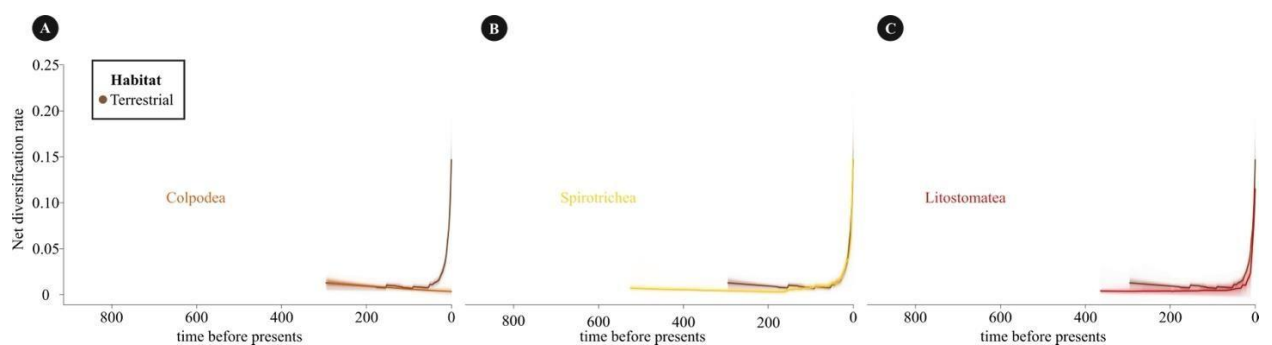


Figura 3. Taxa média de diversificação ao longo do tempo dos clados do Filo Ciliophora associados ao ambiente terrestre e a taxa média das classes monofiléticas de ciliados de solo. (A) Colpodea, (B) Spirotrichea, (C) Litostomatea.

Tabela 1. Frequência das transições dos ambientes na história evolutiva do filo Ciliophora.

Transições dos ambientes	Água Doce	Terrestre	Marinho/Salobra	Simbionte
Água doce	-	1	1	1
Terrestre	13	-	0	1
Marinho/Salobra	22	4	-	5
Simbionte	1	0	0	-
Total	36	5	1	7

Tabela 2. Frequência das regressões dos ambientes na história evolutiva do filo Ciliophora

Regressões dos ambientes	Frequências
Água doce- Terrestre- Água doce	2
Terrestre- Água doce – Terrestre	3
Marinho/Salobra - Água doce - Marinho/Salobra	1
Marinho/Salobra - Terrestre - Marinho/Salobra	7
Marinho/Salobra - Simbionte - Marinho/Salobra	1
Simbionte - Água doce - Simbionte	1
Total	15

4. DISCUSSÃO

Nossos resultados fornecem uma visão abrangente e inovadora sobre o tempo e os padrões evolutivos relacionados aos diferentes habitats explorados pelos ciliados de todas as classes atualmente aceitas para o filo Ciliophora. Conseguimos estabelecer, pela primeira vez, através de dados moleculares as rotas evolutivas para a colonização dos ambientes terrestres pelos ciliados. Nesse contexto nossos resultados corroboraram teorias anteriores, e adicionou uma nova rota. Além disso, mostram como a radiação adaptativa pode estar influenciando no processo evolutivo do grupo.

Nos últimos anos, diversos autores abordaram a evolução de características ecológicas para o filo Ciliophora (BACHY et al., 2012; DUNTHORN et al., 2014; VĎAČNÝ, 2015; RAJTER & VĎAČNÝ, 2016; SUN et al., 2016; RATAJ & VĎAČNÝ, 2018; VĎAČNÝ et al., 2018; XU et al., 2020; COSTA et al., 2021). Contudo, o número de estudos com foco na evolução do habitat ainda é limitado a pequenos grupos e classes (BACHY et al., 2012;

DUNTHORN et al., 2014; SUN et al., 2016; XU et al., 2020), sendo o nosso trabalho, o primeiro a explorar a evolução do habitat para todo o filo Ciliophora. BACHY et al. (2012) investigaram as relações filogenéticas de Tintinnida (Choreotrichia, Spirotrichea), estimando a diversidade desse grupo em ambientes marinhos e de água doce, através de dados moleculares dos genes ITS e 18Sr-RNA, e propuseram uma reconstrução do estado ancestral do habitat. Seus resultados mostraram que o ambiente de água doce foi alcançado a partir de um ancestral marinho (BACKY et al., 2012), o que foi corroborado por nossos dados, já que registramos a mesma rota. Em contrapartida, DUNTHORN et al. (2014) inferiu para a Classe Colpodea uma ancestralidade em habitats de água doce/terrestres e registrou uma regressão recente ao ambiente marinho. Esse achado controverso aos nossos resultados pode estar associado a uma subamostragem ou a metodologia utilizada. Uma vez que a filogenia proposta por DUNTHORN et al. (2014) é restrita a classe Colpodea, enquanto nossos dados abrange todo o filo. E pela ausência de registros, em nossas análises, de sequências relacionadas a espécies dentro da classe que vivem em habitats marinho/salobra. Além disso, nossos achados juntamente com os de BACHY et al. (2012) e DUNTHORN et al. (2014), corroboram na delimitação de rotas para a colonização de diferentes ambientes em Ciliophora, e mostram indícios que vão de acordo com o que BACHY et al. (2012) defendiam, de que análises filogenéticas compostas por indivíduos (gêneros e famílias) que são encontradas em diferentes habitats, demonstram inúmeras alterações recentes.

LOGARES et al. (2009) destaca em seu estudo que os microrganismos, ao contrário dos macroorganismos, apresentam um tamanho populacional maior, um grande potencial de dispersão, maiores taxas reprodutivas e alta diversidade genética, o que justificaria uma maior frequência de transições desses organismos nos diferentes tipos de ambientes. Entretanto, segundo LOGARES et al. (2009), para a maioria dos eucariotos unicelulares aquáticos, a salinidade seria uma barreira de colonização, reduzindo a frequência de transições entre os ambientes marinhos e de água doce. Em contrapartida ao que foi documentado pelos autores, nossas análises filogenéticas mostraram inúmeras transições entre os ambientes marinhos e de água doce ao longo de todo período evolutivo do grupo, incluindo transições recentes e a ausência de clusters exclusivos à cada tipo de ambiente. FORSTER et al. (2012) já havia demonstrado que tal padrão não era representado nas filogenias do filo Ciliophora, e que apesar de encontrar clusters relacionados ao tipo de ambiente, seus registros mostravam que os ciliados apresentavam transições recentes e em maior frequência entre os ambientes marinhos e de água.

Estudos macroevolutivos como o nosso, que inferem o modo de **dispersão** dos ciliados pelos diferentes habitats ao longo da evolução de todo o filo, e utilizam uma árvore datada com calibração primária, é desconhecido até o momento. Nossos dados revelam que independente do habitat explorado pelos ciliados, as taxas de diversificação são constantes durante a chegada ao novo ambiente e nos anos iniciais de exploração, e sofrem um pico quando chegam próximos ao presente. Todavia, alguns habitats, como os terrestres e simbiontes, mostram taxas de diversificação maiores que os demais habitats. O padrão geral das taxas de especiação, extinção e diversificação do filo Ciliophora já havia sido explorado anteriormente por FERNANDES & SCHRAGO (2019), com análises filogenéticas baseadas em dados de proteína e de multi-genes (18Sr-RNA, ITS e 28S). Os autores mostraram que algumas classes e subclasses apresentam taxas de diversificação mais elevadas (FERNANDES & SCHRAGO, 2019). E apesar de revelarem a associação entre os padrões filogenéticos e macroevolutivos presentes no filo, eles não conseguiram estabelecer relações precisas entre as variações nas taxas e características morfológicas/ecológicas exclusivas de cada grupo. COSTA et al. (2021), assim como FERNANDES & SCHRAGO (2019) e o presente estudo, revelaram através de suas análises moleculares, a presença de alterações nas taxas macroevolutivas do filo Ciliophora, mostrando que as relações de parasitismo e de mutualismo levam a um aumento significativo nas taxas de diversificação do grupo. Nossos resultados reforçam tal achado, mostrando que ciliados que desenvolvem hábito simbiótico, seja ele benéfico ou não, apresentam elevadas taxas de diversificação.

Como podemos ver, os ciliados pertencentes a classe Colpodea apresentaram altas taxas de diversificação associadas a origem do grupo, seguida de uma leve redução até recentemente no tempo evolutivo. O alcance ao ambiente terrestre por esses ciliados provavelmente ocorreu em sua origem, há mais de 252 Ma, o que pode estar associado as altas taxas de diversificação iniciais dessa classe. FERNANDES & SCHRAGO (2019) já haviam documentando tal padrão para as taxas de especiação do clado CONThreeP, clado no qual a classe Colpodea se encontra inserida. Contudo, acreditamos que a colonização recente de novos habitats, particularmente os habitats de água doce, pode estar levando a redução na taxa de diversificação da classe. Esses achados unidos aos resultados da reconstrução do estado ancestral do habitat nos levam a pensar que poderia ter ocorrido um processo de radiação adaptativa no interior do clado, uma vez que o último ancestral comum desse grupo pode ter sido o pioneiro na colonização do ambiente terrestre, e assim ter ocupado um novo nicho ecológico.

Além disso, a sobreposição das taxas de diversificação dos ciliados da classe Colpodea e os encontrados em habitats terrestres revela que provavelmente os ciliados desse grupo estejam influenciando diretamente na taxa de diversificação geral do ambiente terrestre, principalmente nos primeiros 200 Ma (Figura 1). Já para os ciliados pertencentes a classe Litostomatea encontramos um leve aumento na taxa média de diversificação desde sua origem até aproximadamente 50 Ma, período em que a classe passa a apresentar um aumento significativo da taxa. Segundo nossos resultados, esse período coincide com o alcance do ambiente terrestre pelos ciliados desse grupo. O que nos leva a acreditar que existe uma forte influência dos ciliados dessa classe sobre o aumento na taxa geral de diversificação do ambiente terrestre, já que além disso, encontramos uma sobreposição entre os gráficos representativos das taxas de diversificação dos ciliados que compõem essa classe e dos que exploram o ambiente terrestre. Quanto aos ciliados da classe Spirotrichea, notamos que a taxa de diversificação é relativamente alta na origem e sofre uma leve redução até aproximadamente ~180 Ma, onde encontramos um pico, seguido de um aumento significativo até o período atual. Além disso, com esse aumento na taxa de diversificação encontramos uma sobreposição com a taxa geral de diversificação dos ciliados terrestres. Esses dados nos revelam que a alta taxa de diversificação encontrada para os ciliados que exploram os habitats terrestres está associada, principalmente, as três classes, Colpodea, Litostomatea e Spirotrichea. A diversidade genética e morfológica dos grupos torna difícil delimitar uma causa específica para as alterações encontradas nas taxas de diversificação das classes, contudo, acreditamos que as transições recentes aos ambientes, principalmente aos ambientes de água doce, e a baixa amostragem de sequências podem estar impulsionando as mudanças expressivas das taxas estimadas. Visto que grande parte das espécies de ciliados terrestres, classificadas no interior dessas e de outras classes, não apresentam dados moleculares. Dentre essas espécies estão *Grossglockneria acuta*, *Nivaliella plana*, *Circinella arenicola*, *Caudiholosticha paranotabilis* e *Edaphospathula fusioplites*.

Ainda que necessário, determinar hipótese única para explicar as altas taxas de diversificação dos ciliados terrestres ainda é algo utópico, já que não encontramos origem única para a chegada desses organismos ao habitat terrestre e, portanto, temos ciliados com características distintas explorando o mesmo ambiente. Por outro lado, os ciliados terrestres apresentam algumas adaptações, morfológicas, fisiológicas e comportamentais, indispensáveis para a sobrevivência nesse ambiente, sendo elas corpo delgado (FOISSNER, 2003), capacidade de produzir estágios de dormência, os cistos de repouso, em períodos de

seca (FOISSNER, 1987), o tamanho do corpo e estratégias r/k (CORLISS & ESSER, 1974; FENCHEL, 1987; FOISSNER, 1993; LÜFTENEGGER et al., 1985; FOISSNER, 1998; VĎAČNÝ & FOISSNER, 2008; VĎAČNÝ et al., 2014).

A formação de cisto é um estágio do ciclo de vida amplamente documentada para os protozoários (CORLISS & ESSER, 1974; FENCHEL, 1987). Dentre suas principais funções estão a proteção contra as condições desfavoráveis dos ambientes e como método de dispersão (CORLISS & ESSER, 1974; FENCHEL, 1987; VERNI & ROSATI, 2009). Para o filo Ciliophora, encontramos registros dessa estratégia de vida para os ciliados terrestres, de água doce e marinhos, contudo, grande parte dos estudos são voltados para os ciliados terrestres (FENCHEL, 1987). Os habitats terrestres apresentam características intrínsecas, como a dimensão dos seus poros, a escassez de água, a flutuação temporal de umidade e de temperatura que são de extrema importância para os protozoários (BAMFORTH, 1980; FENCHEL, 1987). Essas particularidades tornam o encistamento uma adaptação essencial para a sobrevivência dos ciliados, uma vez que esse processo ajuda a evitar a dessecação desses organismos, e ainda possibilita a sua sobrevivência em flutuações de pH, temperatura e competições intra e interespecíficas (FENCHEL, 1987, LI et al., 2022).

O cisto na classe Colpodea é uma característica marcante e pode ser encontrada em praticamente todos os integrantes deste grupo (FOISSNER, 1993). Ciliados da família Marynidae são frequentemente encontrados em solos de várzeas, que são inundados de tempos em tempos a depender da estação do ano, fazendo desses ambientes serem efêmeros. Segundo FOISSNER (1993), esses ciliados são adaptados a ambientes de várzeas em que rapidamente desencistam e reproduzem quando há um aumento da água, e encistam quando potenciais predadores se tornam abundantes e/ou quando a água volta a secar. E para viver neste tipo de ambiente, seus cistos são encontrados com grânulos minerais na parte externa, que confere ainda mais proteção ao cisto e conseqüentemente ao ciliado. FOISSNER (2009) descreveu detalhes do cisto de *Maryna umbrellata*, após FOISSNER et al. (2009) terem mostrado a primeira comprovação da biomineralização feita por um ciliado. O processo ocorria quando o ciliado acumulava os grânulos do ambiente e ao entrar na forma dormente de cisto devido a uma condição ambiental, esses grânulos eram excretados por vesículas do complexo de Golgi, ficando na parte externa à última camada da parede do cisto.

FOISSNER (2003) descreveu duas espécies da família Colpodidae, *Pseudomaryna australis* e *Colpoda brasiliensis*, ambas encontradas em solos de várzea, e apresentavam “envelopes minerais” tanto nas células tróficas quanto nas formas císticas. Geralmente, colpodídios não

apresentam envelopes minerais (FOISSNER 1993), mas o autor constatou essa característica nas espécies, e ainda sugeriu que esse envelope era composto por grânulos muito finos, que eram procurados ativamente pelos ciliados no ambiente e aderido através de uma substância gelatinosa. Com isso, os indivíduos tinham uma proteção contra predadores já que a parte orgânica do ciliado era envolvida por esse envelope, e os organismos eram menos expostos. Um tempo depois, FOISSNER & STOECK, (2009) descreveram a espécie *Sandmanniela terricola* também de solo de várzea, e notaram que seus cistos apresentavam um tamanho igual ao tamanho celular. O motivo era devido a retenção dos vacúolos de comida mesmo na forma cística, além de estarem cheios de bactéria. Os autores classificaram a espécie como sendo um estrategista de adversidade devido a característica acima, além de fazer menção a *Pseudomaryna australiensis* (FOISSNER, 2003) pois os glóbulos opacos que os autores tinham identificado eram também bactérias nos vacúolos de comida.

Levantamentos taxonômicos fundamentados em dados morfológicos apontam que os ciliados terrestres tendem a apresentar tamanho médio menor e assumir formas mais finas do corpo, quando comparados com os ciliados de água doce (FOISSNER, 1987, 1998). Eles acreditam que essas características estejam relacionadas a distribuição de água pelo solo e sua porosidade (FOISSNER, 1987, 1998). Outro ponto importante na evolução dos ciliados terrestres está na estratégia r/K. De forma geral, os autores classificam os ciliados terrestres em um contínuo de estrategistas r/K, que está intimamente associado ao tipo de ambiente explorado. Os representantes da classe Colpodea, normalmente encontrados em ambientes extremos, são classificados como estrategistas r (LÜFTENEGGER et al., 1985, BAMFORTH, 1985, 2001), enquanto as outras espécies, que são mais recorrentes em ambientes estáveis, são consideradas estrategistas K. Os ciliados classificados como estrategistas r se caracterizam pela ampla distribuição em ambientes extremos, redução do tamanho corporal, alta taxa reprodutiva e produção de cistos de dormência (FOISSNER, 1987). BAMFORTH (1985) realizou uma extensa avaliação da composição e frequência de espécies de ciliados em diferentes ambientes terrestres, na tentativa de compreender como a diversidade de ciliados interfere no funcionamento dos ecossistemas. Seus resultados mostraram que diferentes substratos abrigam comunidades distintas de ciliados, onde ambientes extremos se caracterizam pela presença de Colpodea, estrategistas r, e um menor número de espécies totais (BAMFORTH, 1985). Enquanto ambientes mais equilibrados abrigariam grande número de espécies estrategistas K e intermediárias. BAMFORTH (2001) analisou solos minerais para investigar as populações ativas e totais de ciliados, revelando que os ciliados da classe

Colpodea eram os mais frequentes, constituindo cerca de 50% dos ciliados totais e ativos desses ambientes.

5. CONCLUSÃO

Nossos resultados revelam que a conquista do ambiente terrestre pelos ciliados aconteceu pelo menos 5 vezes durante a história evolutiva de Ciliophora e a partir de duas rotas distintas, onde uma corrobora estudos clássicos anteriores e a outra foi documentada pela primeira vez. Demonstramos também que, assim como as relações simbióticas, a aquisição do habitat terrestre pode estar influenciando de forma positiva nas taxas de diversificação do filo, gerando espécies com taxas macroevolutivas mais elevadas. Dentre as transições registradas para o ambiente terrestre, temos uma ocorrendo no interior da classe Armophorea, uma na classe Colpodea, duas na classe Listostomatea e uma na classe Spirotrichea. Além disso, acreditamos que um conjunto de características morfológicas, fisiológicas e evolutivas podem explicar como a aquisição de um novo habitat, principalmente os com condições amplas e variáveis, como é o caso dos ambientes terrestres e simbiontes, poderiam estar influenciando na diversificação dos diferentes clados de ciliados. Apesar de amplos, nossos resultados reforçam a necessidade de aprofundar o conhecimento nos aspectos importantes para esse grupo de organismos, sejam eles morfológicos, ecológicos ou moleculares.

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7. CONSIDERAÇÕES FINAIS

O trabalho atual pode ser considerado inovador visto que utiliza: (i) técnicas macroevolutivas modernas, (ii) ampla amostragem de linhagens de ciliados, e (iii) representantes de ciliados advindos de variados ambientes. Os resultados inovadores ampliam consideravelmente a compreensão sobre a evolução dos ciliados terrestres.

A presente proposta, em breve, poderá estimular novos estudos macroevolutivos dentro do filo Ciliophora, bem como explorar novas ferramentas de bioinformática, visto crescimento do número de dados genômicos para representantes do filo. Embora nos últimos anos o número de genomas disponíveis para Ciliophora tenha aumentado exponencialmente, ainda não há volume de dados para realização de estudos macroevolutivos, tal como a presente Dissertação, o que ressalta a novidade deste estudo e suas potenciais extrapolações.

Embora haja ampliação recente sobre conhecimento da diversidade de ciliados de ambientes edáficos, esse ecossistema precisa ser mais explorado e investigado. Há inúmeras sugestões recentes sobre o grande potencial biotecnológicos dos ciliados terrestres, atuando como os principais predadores das populações de bactérias nitrificantes, sendo essenciais para o crescimento vegetal e de cultivares de interesse econômico. O estudo evolutivo desses microrganismos poderá nos fornecer informações sobre suas aplicações na agricultura e sobre suas fascinantes estratégias contra dessecação e sobrevivência em ecossistemas com intenso déficit hídrico em um planeta, onde a escassez hídrica se apresenta cada vez mais intensa.

8. REFERÊNCIAS BIBLIOGRÁFICAS (Introdução Geral)

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- WEISSE, T. *Meseres corlissi*: a rare oligotrich ciliate adapted to warm water and temporary habitats. **Aquatic Microbial Ecology**, v. 37, p. 75-83, 2004. 10.3354/AME037075.

ANEXO A: Número de acesso para as sequências do gene 18S-rDNA disponíveis em Costa et al. (2021) compiladas para as espécies de ciliados e um grupo externo, com suas respectivas classificações taxonômicas e de habitat (Marinho/Salobro, água doce, terrestres ou simbioses).

Número de acesso	Espécie	Classe	Subclasse	Habitat	Referência
AB25200 2.1	<i>Paramecium bursaria</i>	Oligohymenophorea	Peniculia	Freshwater	Shakoori, F. R., Tasneem, F., Al-Ghanim, K., & Shakoori, A. R. (2014). Variability in Secondary Structure of 18S Ribosomal RNA as Topological Marker for Identification of <i>Paramecium</i> Species. <i>Journal of Cell Biology</i> , 115, 2077-2088. https://doi.org/10.1002/jcb.24885
AB35473 7.1	<i>Levicolaps biwae</i>	Armophorea	-	Freshwater	Foissner, W., Kusuoka, Y., & Shimano, S. (2008). Morphology and Gene Sequence of <i>Levicolaps biwae</i> n. gen., n. sp. (Ciliophora, Prostomatida), a Proposed Endemic from the Ancient Lake Biwa, Japan. <i>Journal of Eukaryotic Microbiology</i> , 55 (3), 185-200. https://doi.org/10.1111/j.1550-7408.2008.00323.x
AB43734 7.1	<i>Troglodytella abressarti</i>	Litostomatea	Trichostomatia	Symbiosis	Irbis, C., Garriga, R., Kabasawa, A., & Ushida, K. (2008). Phylogenetic analysis of <i>Troglodytella abressarti</i> isolated from Chimpanzees (<i>Pan troglodytes verus</i>) in the wild and in captivity. <i>The Journal of General and Applied Microbiology</i> , 54 (6), 409-413. https://doi.org/10.2323/jgam.54.409
AB48109 9.1	<i>Entodinium longinucleatum</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Honma, H., Gurelli, G., Gocmen, B., Mishima, T., Nakai, Y., & Imai, S. (2010). Redescription of <i>Triplumaria selenica</i> (Ciliophora, Entodiniomorpha) and its phylogenetic position based on the infraciliary bands and 18SSU rRNA gene sequence. <i>European Journal of Protistology</i> , 46(3), 180-188. https://doi.org/10.1016/j.ejop.2010.01.005
AB48600 9.1	<i>Pelagothrix alveolata</i>	Prostomatea	-	Freshwater	Berger, H., & Foissner, W. (2004). Illustrated guide and ecological notes to ciliate indicator species (Protozoa, Ciliophora) in running waters, lakes, and sewage plants. <i>Handbuch Angewandte Limnologie: Grundlagen - Gewässerbelastung - Restaurierung - Aquatische Ökotoxikologie - Bewertung - Gewässerschutz</i> , 1-160. doi:10.1002/9783527678488.hbal
AB53016 2.1	<i>Blepharocorys uncinata</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). <i>The Ciliated Protozoa: Characterization, classification, and Guide to the Literature</i> , 3 ed. Springer, New York.
AB53016 4.1	<i>Parentodinium</i> sp.	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). <i>The Ciliated Protozoa: Characterization, classification, and Guide to the Literature</i> , 3 ed. Springer, New York.
AB53016 5.1	<i>Cycloposthium bipalmatum</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). <i>The Ciliated Protozoa: Characterization, classification, and Guide to the Literature</i> , 3 ed. Springer, New York.

AB53353 8.1	<i>Triplumaria selenica</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Honma, H., Gurelli, G., Gocmen, B., Mishima, T., Nakai, Y., & Imai, S. (2010). Redescription of <i>Triplumaria selenica</i> (Ciliophora, Entodiniomorpha) and its phylogenetic position based on the infraciliary bands and 18SSU rRNA gene sequence. <i>European Journal of Protistology</i> , 46(3), 180-188. https://doi.org/10.1016/j.ejop.2010.01.005
AB53418 3.1	<i>Raabena bella</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Honma, H., Gurelli, G., Gocmen, B., Mishima, T., Nakai, Y., & Imai, S. (2010). Redescription of <i>Triplumaria selenica</i> (Ciliophora, Entodiniomorpha) and its phylogenetic position based on the infraciliary bands and 18SSU rRNA gene sequence. <i>European Journal of Protistology</i> , 46(3), 180-188. https://doi.org/10.1016/j.ejop.2010.01.005
AB53418 4.1	<i>Blepharocorys curvigula</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Honma, H., Gurelli, G., Gocmen, B., Mishima, T., Nakai, Y., & Imai, S. (2010). Redescription of <i>Triplumaria selenica</i> (Ciliophora, Entodiniomorpha) and its phylogenetic position based on the infraciliary bands and 18SSU rRNA gene sequence. <i>European Journal of Protistology</i> , 46(3), 180-188. https://doi.org/10.1016/j.ejop.2010.01.005
AB53671 6.1	<i>Eudiplodinium rostratum</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Honma, H., Gurelli, G., Gocmen, B., Mishima, T., Nakai, Y., & Imai, S. (2010). Redescription of <i>Triplumaria selenica</i> (Ciliophora, Entodiniomorpha) and its phylogenetic position based on the infraciliary bands and 18SSU rRNA gene sequence. <i>European Journal of Protistology</i> , 46(3), 180-188. https://doi.org/10.1016/j.ejop.2010.01.005
AB53671 7.1	<i>Ostracodinium clipeolum</i>	Litostomatea	Trichostomat ia	Symbiosis	Vdacný, P. (2018). Evolutionary Associations of Endosymbiotic Ciliates Shed Light on the Timing of the Marsupial-Placental Split. <i>Molecular Biology & Evolution</i> , 35(7), 1757–1769. https://doi.org/10.1093/molbev/msy071
AB53671 8.1	<i>Ostracodinium trivesiculatum</i>	Litostomatea	Trichostomat ia	Symbiosis	Vdacný, P. (2018). Evolutionary Associations of Endosymbiotic Ciliates Shed Light on the Timing of the Marsupial-Placental Split. <i>Molecular Biology & Evolution</i> , 35(7), 1757–1769. https://doi.org/10.1093/molbev/msy071
AB55570 9.1	<i>Bundleia postciliata</i>	Litostomatea	Trichostomat ia	Symbiosis	Vdacný, P. (2018). Evolutionary Associations of Endosymbiotic Ciliates Shed Light on the Timing of the Marsupial-Placental Split. <i>Molecular Biology & Evolution</i> , 35(7), 1757–1769. https://doi.org/10.1093/molbev/msy071
AB55571 0.1	<i>Polydiniella mysorea</i>	Litostomatea	Trichostomat ia	Symbiosis	Vdacný, P. (2018). Evolutionary Associations of Endosymbiotic Ciliates Shed Light on the Timing of the Marsupial-Placental Split. <i>Molecular Biology & Evolution</i> , 35(7), 1757–1769. https://doi.org/10.1093/molbev/msy071
AB55571 1.1	<i>Bundleia benbrookii</i>	Litostomatea	Trichostomat ia	Symbiosis	Vdacný, P. (2018). Evolutionary Associations of Endosymbiotic Ciliates Shed Light on the Timing of the Marsupial-Placental Split. <i>Molecular Biology & Evolution</i> , 35(7), 1757–1769. https://doi.org/10.1093/molbev/msy071
AB55571 2.1	<i>Bundleia nana</i>	Litostomatea	Trichostomat ia	Symbiosis	Vdacný, P. (2018). Evolutionary Associations of Endosymbiotic Ciliates Shed Light on the Timing of the Marsupial-Placental Split. <i>Molecular Biology & Evolution</i> , 35(7), 1757–1769. https://doi.org/10.1093/molbev/msy071

AB55811 7.1	<i>Pelagodileptus trachelioides</i>	Litostomatea	Haptoria	Freshwater	Vd'acny, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>European Journal of Protistology</i> , 47, 295–313. https://doi.org/10.1016/j.ejop.2011.04.006
AB64063 4.1	<i>Favella azorica</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Kazama, T., Ishida, S., Shimano, S., & Urabe, U. (2012). Discrepancy between conventional morphological systematics and nuclear phylogeny of tintinnids (Ciliophora: Choreotrichia). <i>Plankton & Benthos Research</i> , 7(3), 111–125. https://doi.org/10.3800/pbr.7.111
AB79374 4.1	<i>Bozasella gracilis</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79374 5.1	<i>Triplumaria sole</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79377 7.1	<i>Triplumaria sukun</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79377 8.1	<i>Triplumaria dvoinosi</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79378 1	<i>Triplumaria fulgor</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79378 2.1	<i>Triplumaria harpagonis</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79378 3.1	<i>Gassovskiella galea</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003

AB79409 1.1	<i>Ditoxum funinucleum</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79496 9.1	<i>Tetratoxum parvum</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79497 0.1	<i>Tetratoxum unifasciculatum</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79497 1.1	<i>Tetratoxum excavatum</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79497 2.1	<i>Pseudoentodinium elephantis</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79497 3.1	<i>Ochoterenaiia appendiculata</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79497 4.1	<i>Circodinium minimum</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79497 5.1	<i>Blepharocorys microcorys</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79497 6.1	<i>Blepharocorys angusta</i>	Litostomatea	Trichostomatia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). <i>Bozasella gracilis</i> n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003

AB79497 7.1	<i>Blepharocorys jubata</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). Bozasella gracilis n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79498 1.1	<i>Helicozoster indicus</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). Bozasella gracilis n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79498 2.1	<i>Latteuria polyfaria</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). Bozasella gracilis n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79498 3.1	<i>Latteuria media</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). Bozasella gracilis n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79498 4.1	<i>Paraisotricha minuta</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). Bozasella gracilis n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79502 4.1	<i>Sulcoarcus pellucidulus</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). Bozasella gracilis n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79502 5.1	<i>Didesmis ovalis</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). Bozasella gracilis n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79502 6.1	<i>Alloiozona trizona</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). Bozasella gracilis n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79502 7.1	<i>Blepharocorys hemicyliatus</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). Bozasella gracilis n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003

AB79502 8.1	<i>Hemiprorodon gymnoprosthium</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). Bozasella gracilis n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB79502 9.1	<i>Prorodonopsis coli</i>	Litostomatea	Trichostomat ia	Symbiosis	Ito, A., Ishihara, M., & Imai, S. (2014). Bozasella gracilis n. sp. (Ciliophora, Entodiniomorphida) from Asian elephant and phylogenetic analysis of entodiniomorphids and vestibuliferids. <i>European Journal of Protistology</i> , 50(2), 134-152. http://dx.doi.org/10.1016/j.ejop.2014.01.003
AB97987 0.1	<i>Ephelota gigantea</i>	Phyllopharyng ea	Suctorina	Marine/Brac kish	Sato, Y., Muto, T.-A., Endo, Y., Kobayashi, T., Nakano, N., Sato, H., Nishitani, G., & Sato-Okoshi, W. (2015). Morphological, Developmental, and Ecological Characteristics of the Suctorian Ciliate <i>Ephelota gigantea</i> (Ciliophora, Phyllopharyngea, Ephelotidae) Found on Cultured Wakame Seaweed in Northeastern Japan. <i>Acta Protozoologica</i> , 54, 295-303. https://doi.org/10.4467/16890027AP.15.025.3539
AB97987 1.1	<i>Ephelota plana</i>	Phyllopharyng ea	Suctorina	Marine/Brac kish	Sato, Y., Muto, T.-A., Endo, Y., Kobayashi, T., Nakano, N., Sato, H., Nishitani, G., & Sato-Okoshi, W. (2015). Morphological, Developmental, and Ecological Characteristics of the Suctorian Ciliate <i>Ephelota gigantea</i> (Ciliophora, Phyllopharyngea, Ephelotidae) Found on Cultured Wakame Seaweed in Northeastern Japan. <i>Acta Protozoologica</i> , 54, 295-303. https://doi.org/10.4467/16890027AP.15.025.3539
AF02976 2.1	<i>Isotricha prostoma</i>	Litostomatea	Trichostomat ia	Symbiosis	Strüder-Kypke, M. C., Wright, A. D., Foissner, W., Chatzinotas, A., & Lynn, D. H. (2006). Molecular phylogeny of litostome ciliates (Ciliophora, Litostomatea) with emphasis on free-living haptorian genera. <i>Protist</i> , 157(3), 261–278. https://doi.org/10.1016/j.protis.2006.03.003
AF02976 3.1	<i>Balantioides coli</i>	Litostomatea	Trichostomat ia	Symbiosis	Strüder-Kypke, M. C., Wright, A. D., Foissner, W., Chatzinotas, A., & Lynn, D. H. (2006). Molecular phylogeny of litostome ciliates (Ciliophora, Litostomatea) with emphasis on free-living haptorian genera. <i>Protist</i> , 157(3), 261–278. https://doi.org/10.1016/j.protis.2006.03.003
AF04248 6.1	<i>Macropodinium yalabense</i>		Trichostomat ia	Symbiosis	Cameron, S. L., Wright, A. D. G., & O'Donoghue, P. J. (2003). An expanded phylogeny of the Entodiniomorphida (Ciliophora : Litostomatea). <i>Acta Protozoologica</i> , 42(1), 1-6.
AF06045 2.1	<i>Pseudoplatyophr ya nana</i>	Colpodea	-	Terrestrial	Foissner, W. (1993). Colpodea (Ciliophora). Fischer, Stuttgart. <i>Protozoenfauna</i> , 4(i-x), 1-798.
AF06045 3.1	<i>Bresslauer vorax</i>	Colpodea	-	Terrestrial	Foissner, W. (1993). Colpodea (Ciliophora). Fischer, Stuttgart. <i>Protozoenfauna</i> , 4(i-x), 1-798.
AF06045 4.1	<i>Platyophrya vorax</i>	Colpodea	-	Terrestrial	Foissner, W. (1993). Colpodea (Ciliophora). Fischer, Stuttgart. <i>Protozoenfauna</i> , 4(i-x), 1-798.

AF10030 1.1	<i>Paramecium calkinsi</i>	Oligohymenophorea	Peniculia	Marine/Brackish	Strüder-Kypke, M. C., Wright, A. D., Fokin, S. I., & Lynn, D. H. (2000). Phylogenetic relationships of the genus <i>Paramecium</i> inferred from small subunit rRNA gene sequences. <i>Molecular Phylogenetics & Evolution</i> , 14(1), 122–130. https://doi.org/10.1006/mpev.1999.0686
AF10031 5.1	<i>Paramecium primaurelia</i>	Oligohymenophorea	Peniculia	Freshwater	Strüder-Kypke, M. C., Wright, A. D., Fokin, S. I., & Lynn, D. H. (2000). Phylogenetic relationships of the genus <i>Paramecium</i> inferred from small subunit rRNA gene sequences. <i>Molecular Phylogenetics & Evolution</i> , 14(1), 122–130. https://doi.org/10.1006/mpev.1999.0686
AF14535 2.1	<i>Nyctotheroides parvus</i>	Armophorea	-	Symbiosis	Affa'A, F., Hickey, D. A., Struder-Kypke, M., & Lynn, D. H. (2004). Phylogenetic Position of Species in the Genera <i>Anoplophrya</i> , <i>Plugiotoma</i> , and <i>Nyctotheroides</i> (Phylum Ciliophora), Endosymbiotic Ciliates of Annelids and Anurans. <i>Journal of eukaryotic Microbiology</i> , 51(3), 301-306. https://doi.org/10.1111/j.1550-7408.2004.tb00570.x
AF14535 3.1	<i>Nyctotheroides deslierresae</i>	Armophorea	-	Symbiosis	Affa'A, F., Hickey, D. A., Struder-Kypke, M., & Lynn, D. H. (2004). Phylogenetic Position of Species in the Genera <i>Anoplophrya</i> , <i>Plugiotoma</i> , and <i>Nyctotheroides</i> (Phylum Ciliophora), Endosymbiotic Ciliates of Annelids and Anurans. <i>Journal of eukaryotic Microbiology</i> , 51(3), 301-306. https://doi.org/10.1111/j.1550-7408.2004.tb00570.x
AF16412 1.1	<i>Oxytricha trifallax</i>	Spirotrichea	Hypotrichia	Freshwater	Foissner, W., & Berger, H. (1999). Identification and Ontogenesis of the <i>nomen nudum</i> Hypotrichs (Protozoa: Ciliophora) <i>Oxytricha nova</i> (= <i>Sterkiella nova</i> sp. n.) and <i>O. trifallax</i> (= <i>S. histriomuscorum</i>). <i>Acta Protozoologica</i> , 38, 215-248.
AF16412 2.1	<i>Oxytricha granulifera</i>	Spirotrichea	Hypotrichia	Terrestrial	Shao, C., Lv, Z., Pan, Y., Al-Rasheid, K. A., & Yi, Z. Z. (2014). Morphology and phylogenetic analysis of two oxytrichid soil ciliates from China, <i>Oxytricha paragrulifera</i> n. sp. and <i>Oxytricha granulifera</i> Foissner and Adam, 1983 (Protista, Ciliophora, Hypotrichia). <i>International Journal of Systematic and Evolutionary Microbiology</i> , 64, 3016–3027. https://doi.org/10.1099/ijs.0.062281-0
AF16412 3.1	<i>Stylonychia mytilus</i>	Spirotrichea	Hypotrichia	Freshwater	Berger, H. (1999). Monograph of the Oxytrichidae (Ciliophora, Hypotrichia). <i>Monographiae Biologicae</i> , 78, i-xii, 1-1080. doi: 10.1007/978-94-011-4637-1
AF16412 4.1	<i>Stylonychia lemnae</i>	Spirotrichea	Hypotrichia	Freshwater	Berger, H. (1999). Monograph of the Oxytrichidae (Ciliophora, Hypotrichia). <i>Monographiae Biologicae</i> , 78, i-xii, 1-1080. doi: 10.1007/978-94-011-4637-1
AF16412 5.1	<i>Hemiurosomoida longa</i>	Spirotrichea	Stichotrichia	Terrestrial	Singh, J., & Kamra, K. (2015). Molecular phylogeny of <i>Urosomoida agilis</i> , and new combinations: <i>Hemiurosomoida longa</i> gen. nov., comb. nov., and <i>Heterourosomoida lanceolata</i> gen. nov., comb. nov. (Ciliophora, Hypotrichia). <i>European Journal of Protistology</i> , 51(1), 55–65. https://doi.org/10.1016/j.ejop.2014.11.005
AF16412 7.1	<i>Paraurostyla weissei</i>	Spirotrichea	Stichotrichia	Freshwater	Berger, H. (1999). Monograph of the Oxytrichidae (Ciliophora, Hypotrichia). <i>Monographiae Biologicae</i> , 78, i-xii, 1-1080. doi: 10.1007/978-94-011-4637-1

AF16412 8.1	<i>Pleurotricha lanceolata</i>	Spirotrichea	-	Freshwater	Berger, H. (1999). Monograph of the Oxytrichidae (Ciliophora, Hypotrichia). <i>Monographiae Biologicae</i> , 78, i-xii, 1-1080. doi: 10.1007/978-94-011-4637-1
AF16413 0.1	<i>Uroleptus gallina</i>	Spirotrichea	Stichotrichia	Freshwater	Hewitt, E. A., Muller, K. M., Cannone, J., Hogan, D. J., Gutell, R., & Prescott, D. M. (2003). Phylogenetic relationships among 28 spirotrichous ciliates documented by rDNA. <i>Molecular Phylogenetics and Evolution</i> , 29, 258–267. https://doi.org/10.1016/S1055-7903(03)00097-6
AF16413 1.1	<i>Uroleptus pisces</i>	Spirotrichea	Stichotrichia	Freshwater	Hewitt, E. A., Muller, K. M., Cannone, J., Hogan, D. J., Gutell, R., & Prescott, D. M. (2003). Phylogenetic relationships among 28 spirotrichous ciliates documented by rDNA. <i>Molecular Phylogenetics and Evolution</i> , 29, 258–267. https://doi.org/10.1016/S1055-7903(03)00097-6
AF16413 2.1	<i>Paruroleptus lepisma</i>	Spirotrichea	Stichotrichia	Freshwater	Hewitt, E. A., Muller, K. M., Cannone, J., Hogan, D. J., Gutell, R., & Prescott, D. M. (2003). Phylogenetic relationships among 28 spirotrichous ciliates documented by rDNA. <i>Molecular Phylogenetics and Evolution</i> , 29, 258–267. https://doi.org/10.1016/S1055-7903(03)00097-6
AF16413 3.1	<i>Gastrostyla steinii</i>	Spirotrichea	Stichotrichia	Terrestrial	Foissner, W., Agatha, S., & Berger, H. (2002). Soil Ciliates (Protozoa, Ciliophora) from Namibia (Southwest Africa), with Emphasis on Two Contrasting Environments, the Etosha Region and the Namib Desert. <i>Denisia</i> , 5, 1-1459.
AF16413 4.1	<i>Engelmanniella mobilis</i>	Spirotrichea	Stichotrichia	Terrestrial	Wirnsberger-Aeschl, E., Foissner, W., & Foissner, I. (1989). Morphogenesis and ultrastructure of the soil ciliate <i>Engelmanniella mobilis</i> (Ciliophora, Hypotrichida). <i>European Journal of Protistology</i> , 24(4), 354–368. https://doi.org/10.1016/S0932-4739(89)80006-9
AF16413 5.1	<i>Cyrtohymena citrina</i>	Spirotrichea	Hypotrichia	Terrestrial	Foissner, W., Moon-van der Staay, S. Y., van der Staay, G. W. M., Hackstein, J. H. P., Krautgartner, W.-D., & Berger, H. (2004). Reconciling classical and molecular phylogenies in the stichotrichines (Ciliophora, Spirotrichea), including new sequences from some rare species. <i>European Journal of Protistology</i> , 40, 265–281. https://doi.org/10.1016/j.ejop.2004.05.004
AF16413 6.1	<i>Euplotes aediculatus</i>	Spirotrichea	Euplotia	Freshwater	Boscaro, V., Husnik, F., Vannini, C., & Keeling, P. J. (2019). Symbionts of the ciliate <i>Euplotes</i> : diversity, patterns and potential as models for bacteria–eukaryote endosymbioses. <i>Proceedings of the Royal Society B</i> , 286, 20190693. http://dx.doi.org/10.1098/rspb.2019.0693
AF16413 7.1	<i>Halteria grandinella</i>	Spirotrichea	Stichotrichia	Freshwater	Riley, J. L., & Katz, L. A. (2001). Widespread distribution of extensive chromosomal fragmentation in ciliates. <i>Molecular Biology & Evolution</i> , 18(7), 1372–1377. https://doi.org/10.1093/oxfordjournals.molbev.a003921
AF18466 5.1	<i>Tetrahymena farleyi</i>	Oligohymenophorea	Hymenostomatia	Symbiosis	Lynn, D. H., Gransden, S. G., Wright, A.-D. G., & Josephson, G. (2000). Characterization of a new species of the ciliate <i>Tetrahymena</i> (Ciliophora: Oligohymenophorea) isolated from the urine of a dog: First report of <i>Tetrahymena</i> from a mammal. <i>Acta Protozoologica</i> , 39, 289-294

AF21765 5.1	<i>Paramecium caudatum</i>	Oligohymenophorea	Peniculia	Freshwater	Shakoori, F. R., Tasneem, F., Al-Ghanim, K., Mahboob, S., Al-Misned, F., Jahan, N., & Shakoori, A. R. (2014). Variability in secondary structure of 18S ribosomal RNA as topological marker for identification of <i>Paramecium</i> species. <i>Journal of Cellular Biochemistry</i> , 115(12), 2077–2088. https://doi.org/10.1002/jcb.24885
AF29881 7.1	<i>Amylavorax dehorityi</i>	Litostomatea	Trichostomatia	Symbiosis	Cameron, S. L., Adlard, R. D., & O'Donoghue, P. J. (2001). Evidence for an independent radiation of endosymbiotic litostome ciliates within Australian marsupial herbivores. <i>Molecular Phylogenetics & Evolution</i> , 20(2), 302–310. https://doi.org/10.1006/mpev.2001.0986
AF29881 8.1	<i>Polycosta turniae</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AF29881 9.1	<i>Polycosta roundi</i>	Litostomatea	Trichostomatia	Symbiosis	Cameron, S. L., & O'Donoghue, P. J. (2004). Phylogeny and biogeography of the "Australian" trichostomes (Ciliophora: Litostomata). <i>Protist</i> , 155(2), 215–235. https://doi.org/10.1078/143446104774199600
AF29882 0.1	<i>Macropodinium ennuensis</i>	Litostomatea	Trichostomatia	Symbiosis	Cameron, S. L., Wright, A. D. G., & O'Donoghue, P. J. (2003). An expanded phylogeny of the Entodiniomorphida (Ciliophora : Litostomatea). <i>Acta Protozoologica</i> , 42(1), 1-6.
AF29882 1.1	<i>Bitricha tasmaniensis</i>	Litostomatea	Trichostomatia	Symbiosis	Cameron, S. L., Adlard, R. D., & O'Donoghue, P. J. (2001). Evidence for an independent radiation of endosymbiotic litostome ciliates within Australian marsupial herbivores. <i>Molecular Phylogenetics & Evolution</i> , 20(2), 302–310. https://doi.org/10.1006/mpev.2001.0986
AF29882 2.1	<i>Bandia smalesae</i>	Litostomatea	Trichostomatia	Symbiosis	Cameron, S. L., & O'Donoghue, P. J. (2004). Phylogeny and biogeography of the "Australian" trichostomes (Ciliophora: Litostomata). <i>Protist</i> , 155(2), 215–235. https://doi.org/10.1078/143446104774199600
AF29882 3.1	<i>Bandia tammar</i>	Litostomatea	Trichostomatia	Symbiosis	Cameron, S. L., & O'Donoghue, P. J. (2004). Phylogeny and biogeography of the "Australian" trichostomes (Ciliophora: Litostomata). <i>Protist</i> , 155(2), 215–235. https://doi.org/10.1078/143446104774199600
AF29882 4.1	<i>Bandia cribbi</i>	Litostomatea	Trichostomatia	Symbiosis	Cameron, S. L., & O'Donoghue, P. J. (2004). Phylogeny and biogeography of the "Australian" trichostomes (Ciliophora: Litostomata). <i>Protist</i> , 155(2), 215–235. https://doi.org/10.1078/143446104774199600
AF29882 5.1	<i>Amylavorax dogieli</i>	Litostomatea	Trichostomatia	Symbiosis	Cameron, S. L., Adlard, R. D., & O'Donoghue, P. J. (2001). Evidence for an independent radiation of endosymbiotic litostome ciliates within Australian marsupial herbivores. <i>Molecular Phylogenetics & Evolution</i> , 20(2), 302–310. https://doi.org/10.1006/mpev.2001.0986
AF30028 6.1	<i>Sorogena stoianovitchae</i>	Colpodea	-	Terrestrial	Lasek-Nesselquist, E., & Katz, L. A. (2001). Phylogenetic position of <i>Sorogena stoianovitchae</i> and relationships within the class Colpodea (Ciliophora) based on SSU rDNA sequences. <i>The Journal of Eukaryotic Microbiology</i> , 48(5), 604–607. https://doi.org/10.1111/j.1550-7408.2001.tb00197.x

AF30562 5.1	<i>Aspidisca steini</i>	Spirotrichea	Euplotia	Marine/Brackish	Chen, Z., & Song, W. (2002). Phylogenetic Positions of <i>Aspidisca steini</i> and <i>Euplotes vannus</i> within the Order Euplotida (Hypotrichia: Ciliophora) Inferred from Complete Small Subunit Ribosomal RNA Gene Sequences. <i>Acta Protozoologica</i> , 41, 1-9.
AF32421 8.1	<i>Perkinsus marinus</i>	-	Outgroup	-	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The all-data-based evolutionary hypothesis of ciliated Protists with a revised classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 1-14.
AF35714 4.1	<i>Stentor polymorphus</i>	Heterotrichea	-	Freshwater	Gong, Y. C., Yu, Y. H., Zhu, F. Y., & Feng, W. S. (2007). Molecular phylogeny of <i>Stentor</i> (Ciliophora: Heterotrichea) based on small subunit ribosomal RNA sequences. <i>Journal of Eukaryotic Microbiology</i> , 54(1), 45-48. https://doi.org/10.1111/j.1550-7408.2006.00147.x
AF35714 5.1	<i>Stentor coeruleus</i>	Heterotrichea	-	Freshwater	Gong, Y. C., Yu, Y. H., Zhu, F. Y., & Feng, W. S. (2007). Molecular phylogeny of <i>Stentor</i> (Ciliophora: Heterotrichea) based on small subunit ribosomal RNA sequences. <i>Journal of Eukaryotic Microbiology</i> , 54(1), 45-48. https://doi.org/10.1111/j.1550-7408.2006.00147.x
AF35791 3.1	<i>Stentor roeseli</i>	Heterotrichea	-	Freshwater	Gong, Y. C., Yu, Y. H., Zhu, F. Y., & Feng, W. S. (2007). Molecular phylogeny of <i>Stentor</i> (Ciliophora: Heterotrichea) based on small subunit ribosomal RNA sequences. <i>Journal of Eukaryotic Microbiology</i> , 54(1), 45-48. https://doi.org/10.1111/j.1550-7408.2006.00147.x
AF36403 8.1	<i>Tetrahymena vorax</i>	Oligohymenophorea	Hymenostomata	Freshwater	Chantangsi, C., Lynn, D. H., Brandl, M. T., Cole, J. C., Hetrick, N., & Ikononi, P. (2007). Barcoding ciliates: a comprehensive study of 75 isolates of the genus <i>Tetrahymena</i> . <i>International Journal of Systematic and Evolutionary Microbiology</i> , 57 (10), 2412-2423. https://doi.org/10.1099/ijs.0.64865-0
AF36403 9.1	<i>Tetrahymena bergeri</i>	Oligohymenophorea	Hymenostomata	Freshwater	Chantangsi, C., Lynn, D. H., Brandl, M. T., Cole, J. C., Hetrick, N., & Ikononi, P. (2007). Barcoding ciliates: a comprehensive study of 75 isolates of the genus <i>Tetrahymena</i> . <i>International Journal of Systematic and Evolutionary Microbiology</i> , 57 (10), 2412-2423. https://doi.org/10.1099/ijs.0.64865-0
AF36404 0.1	<i>Tetrahymena mobilis</i>	Oligohymenophorea	Hymenostomata	Freshwater	Chantangsi, C., Lynn, D. H., Brandl, M. T., Cole, J. C., Hetrick, N., & Ikononi, P. (2007). Barcoding ciliates: a comprehensive study of 75 isolates of the genus <i>Tetrahymena</i> . <i>International Journal of Systematic and Evolutionary Microbiology</i> , 57 (10), 2412-2423. https://doi.org/10.1099/ijs.0.64865-0
AF36404 1.1	<i>Tetrahymena setosa</i>	Oligohymenophorea	Hymenostomata	Freshwater	Chantangsi, C., Lynn, D. H., Brandl, M. T., Cole, J. C., Hetrick, N., & Ikononi, P. (2007). Barcoding ciliates: a comprehensive study of 75 isolates of the genus <i>Tetrahymena</i> . <i>International Journal of Systematic and Evolutionary Microbiology</i> , 57 (10), 2412-2423. https://doi.org/10.1099/ijs.0.64865-0

AF36404 3.1	<i>Lambornella</i> sp	Oligohymenop horea	-	Symbiosis	Strüder-Kypke, M. C., Wright, A. D., Jerome, C. A., & Lynn, D. H. (2001). Parallel evolution of histophagy in ciliates of the genus <i>Tetrahymena</i> . <i>BMC Evolutionary Biology</i> , 1, 5. https://doi.org/10.1186/1471-2148-1-5
AF37002 7.1	<i>Oxytricha</i> <i>ferruginea</i>	Spirotrichea	Hypotrichia	Freshwater	Berger, H. (1999). Monograph of the Oxytrichidae (Ciliophora, Hypotrichia). <i>Monographiae Biologicae</i> , 78, i-xii, 1-1080. doi: 10.1007/978-94-011-4637-1
AF37002 8.1	<i>Oxytricha saltans</i>	Spirotrichea	Hypotrichia	Marine/Brac kish	Berger, H. (1999). Monograph of the Oxytrichidae (Ciliophora, Hypotrichia). <i>Monographiae Biologicae</i> , 78, i-xii, 1-1080. doi: 10.1007/978-94-011-4637-1
AF39697 3.1	<i>Stylonychia</i> <i>pustulata</i>	Spirotrichea	Hypotrichia	Freshwater	Berger, H. (1999). Monograph of the Oxytrichidae (Ciliophora, Hypotrichia). <i>Monographiae Biologicae</i> , 78, i-xii, 1-1080. doi: 10.1007/978-94-011-4637-1
AF39911 0.1	<i>Tintinnopsis</i> <i>tubulosoides</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Snoeyenbos-West, O., Salcedo, T., McManus, G. B., & Katz, L. A. (2002). Insights into the diversity of choreotrich and oligotrich ciliates (Class: Spirotrichea) based on genealogical analyses of multiple loci. <i>International Journal of Systematic & Evolutionary microbiology</i> , 52(Pt 5), 1901–1913. https://doi.org/10.1099/00207713-52-5-1901
AF39914 3.1	<i>Metacylis</i> <i>angulata</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Snoeyenbos-West, O., Salcedo, T., McManus, G. B., & Katz, L. A. (2002). Insights into the diversity of choreotrich and oligotrich ciliates (Class: Spirotrichea) based on genealogical analyses of multiple loci. <i>International Journal of Systematic & Evolutionary microbiology</i> , 52(Pt 5), 1901–1913. https://doi.org/10.1099/00207713-52-5-1901
AF39915 3.1	<i>Laboea strobila</i>	Spirotrichea	Oligotrichia	Marine/Brac kish	Snoeyenbos-West, O., Salcedo, T., McManus, G. B., & Katz, L. A. (2002). Insights into the diversity of choreotrich and oligotrich ciliates (Class: Spirotrichea) based on genealogical analyses of multiple loci. <i>International Journal of Systematic & Evolutionary microbiology</i> , 52(Pt 5), 1901–1913. https://doi.org/10.1099/00207713-52-5-1901
AF49270 6.1	<i>Euplotes rariseta</i>	Spirotrichea	Euplotia	Marine/Brac kish	Jiang, J., Zhang, Q., Hu, X., Shao, C., Al-Rasheid, K. A. S., & Song, W. (2010). Two new marine ciliates, <i>Euplotes sinicus</i> sp. nov. and <i>Euplotes parabalteatus</i> sp. nov., and a new small subunit rRNA gene sequence of <i>Euplotes rariseta</i> (Ciliophora, Spirotrichea, Euplotida). <i>International Journal of Systematic & Evolutionary Microbiology</i> , 60, 1241–1251. https://doi.org/10.1099/ij.s.0.012120-0
AF49270 7.1	<i>Euplotes</i> <i>woodruffi</i>	Spirotrichea	Euplotia	Freshwater	Dai, R., Xu, K., & He, Y. (2013). Morphological, Physiological, and Molecular Evidences Suggest that <i>Euplotes parawoodruffi</i> is a Junior Synonym of <i>Euplotes woodruffi</i> (Ciliophora, Euplotida). <i>Journal of Eukaryotic Microbiology</i> , 60, 70–78. https://doi.org/10.1111/jeu.12007
AF52775 6.1	<i>Schizocaryum</i> <i>dogieli</i>	Oligohymenop horea	-	Symbiosis	Lynn, D. H., & Strüder-Kypke, M. (2002). Phylogenetic position of <i>Licnophora</i> , <i>Lechriopyla</i> , and <i>Schizocaryum</i> , three unusual ciliates (phylum Ciliophora) endosymbiotic in echinoderms (phylum Echinodermata). <i>The Journal of Eukaryotic Microbiology</i> , 49(6), 460–468. https://doi.org/10.1111/j.1550-7408.2002.tb00229.x

AF52775 7.1	<i>Lechriopyla mystax</i>	Plagiopylea	-	Symbiosis	Lynn, D. H., & Strüder-Kypke, M. (2002). Phylogenetic position of <i>Licinophora</i> , <i>Lechriopyla</i> , and <i>Schizocaryum</i> , three unusual ciliates (phylum Ciliophora) endosymbiotic in echinoderms (phylum Echinodermata). <i>The Journal of Eukaryotic Microbiology</i> , 49(6), 460–468. https://doi.org/10.1111/j.1550-7408.2002.tb00229.x
AJ22267 8.1	<i>Nyctotherus ovalis</i>	Armophorea	-	Symbiosis	van Hoek, A. H., van Alen, T. A., Sprakel, V. S., Hackstein, J. H., & Vogels, G. D. (1998). Evolution of anaerobic ciliates from the gastrointestinal tract: phylogenetic analysis of the ribosomal repeat from <i>Nyctotherus ovalis</i> and its relatives. <i>Molecular Biology & Evolution</i> , 15(9), 1195–1206. https://doi.org/10.1093/oxfordjournals.molbev.a026027
AJ27787 6.1	<i>Holosticha multistylata</i>	Spirotrichea	Stichotrichia	Terrestrial	Shin, M. K., Hwang, U. W., Kim, W., Wright, A.-D. G., Krawczyk, C., Lynn, D. H. (2000). Phylogenetic position of the ciliates <i>Phacodinium</i> (Order Phacodiniida) and Protocruzia (Subclass Protocruziida) and systematics of the spirotrich ciliates examined by small subunit ribosomal RNA gene sequences. <i>European Journal of Protistology</i> , 36(3), 293-302. https://doi.org/10.1016/S0932-4739(00)80005-X
AJ27787 7.1	<i>Phacodinium metchnikoffi</i>	Spirotrichea	Phacodiniida	Terrestrial	Shin, M. K., Hwang, U. W., Kim, W., Wright, A.-D. G., Krawczyk, C., Lynn, D. H. (2000). Phylogenetic position of the ciliates <i>Phacodinium</i> (Order Phacodiniida) and Protocruzia (Subclass Protocruziida) and systematics of the spirotrich ciliates examined by small subunit ribosomal RNA gene sequences. <i>European Journal of Protistology</i> , 36(3), 293-302. https://doi.org/10.1016/S0932-4739(00)80005-X
AJ29252 6.1	<i>Trimyema thermophilu</i>	Plagiopylea	-	Marine/Brackish	Baumgartner, M., Stetter, K. O., & Foissner, W. (2002). Morphological, Small Subunit rRNA, and Physiological Characterization of <i>Trimyema minutum</i> (Kahl, 1931), an Anaerobic Ciliate from Submarine Hydrothermal Vents Growing from 28 °C to 52 °C. <i>Journal of Eukaryotic Microbiology</i> , 49 (3), 227-238.
AJ30524 7.1	<i>Euplotes parkei</i>	Spirotrichea	Euplotia	Marine/Brackish	Petroni, G., Dini, F., Verni, F., & Rosati, G. (2002). A molecular approach to the tangled intrageneric relationships underlying phylogeny in <i>Euplotes</i> (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics & Evolution</i> , 22(1), 118–130. https://doi.org/10.1006/mpev.2001.1030
AJ30525 4.1	<i>Euplotes muscolicola</i>	Spirotrichea	Euplotia	Freshwater	Petroni, G., Dini, F., Verni, F., & Rosati, G. (2002). A molecular approach to the tangled intrageneric relationships underlying phylogeny in <i>Euplotes</i> (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics & Evolution</i> , 22(1), 118–130. https://doi.org/10.1006/mpev.2001.1030
AJ31048 6.1	<i>Onychodromus grandis</i>	Spirotrichea	Stichotrichia	Freshwater	Foissner, W., Moon-van der Staay, S. Y., van der Staay, G. W. M., Hackstein, J. H. P., Krautgartner, W.-D., & Berger, H. (2004). Reconciling classical and molecular phylogenies in the stichotrichines (Ciliophora, Spirotrichea), including new sequences from some rare species. <i>European Journal of Protistology</i> , 40, 265–281.

AJ31048 9.1	<i>Euplotes octocarinatus</i>	Spirotrichea	Euplotia	Freshwater	Méndez-Sánchez, D., Mayén-Estrada, R., & Hu, X. (2020). <i>Euplotes octocarinatus</i> Carter, 1972 (Ciliophora, Spirotrichea, Euplotidae): Considerations on its morphology, phylogeny, and biogeography. <i>European Journal of Protistology</i> , 74, 125667. https://doi.org/10.1016/j.ejop.2019.125667
AJ31049 1.1	<i>Euplotes eurytomus</i>	Spirotrichea	Euplotia	Freshwater	Foissner, W., Moon-van der Staay, S. Y., van der Staay, G. W. M., Hackstein, J. H. P., Krautgartner, W.-D., & Berger, H. (2004). Reconciling classical and molecular phylogenies in the stichotrichines (Ciliophora, Spirotrichea), including new sequences from some rare species. <i>European Journal of Protistology</i> , 40, 265–281. https://doi.org/10.1016/j.ejop.2004.05.004
AJ31049 3.1	<i>Gonostomum strenuum</i>	Spirotrichea	Stichotrichia	Terrestrial	Foissner, W., Moon-van der Staay, S. Y., van der Staay, G. W. M., Hackstein, J. H. P., Krautgartner, W.-D., & Berger, H. (2004). Reconciling classical and molecular phylogenies in the stichotrichines (Ciliophora, Spirotrichea), including new sequences from some rare species. <i>European Journal of Protistology</i> , 40, 265–281. https://doi.org/10.1016/j.ejop.2004.05.004
AJ48891 1.1	<i>Strombidium inclinatum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Modeo, L., Petroni, G., Rosati, G., & Montagnes, D. J. (2003). A multidisciplinary approach to describe protists: redescrptions of <i>Novistrombidium testaceum</i> Anigstein 1914 and <i>Strombidium inclinatum</i> Montagnes, Taylor, and Lynn 1990 (Ciliophora, Oligotrichia). <i>The Journal of Eukaryotic Microbiology</i> , 50(3), 175–189. https://doi.org/10.1111/j.1550-7408.2003.tb00114.x
AJ51186 1.1	<i>Glaucoma scintillans</i>	Oligohymenophorea	-	Freshwater	Fried, J., Ludwig, W., Psenner, R., & Schleifer, K. H. (2002). Improvement of ciliate identification and quantification: a new protocol for fluorescence in situ hybridization (FISH) in combination with silver stain techniques. <i>Systematic Applied Microbiology</i> , 25(4), 555–571. https://doi.org/10.1078/07232020260517706
AJ53539 1.1	<i>Alexandrium tamarense</i>	Dinophyceae (Dinoflagellata)	Outgroup	-	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The all-data-based evolutionary hypothesis of ciliated Protists with a revised classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 1–14.
AJ53742 7.1	<i>Peritromus kahli</i>	Heterotrichea	-	Marine/Brackish	Rosati, G., Modeo, L., Melai, M., Petroni, G., & Verni, F. (2004). A multidisciplinary approach to describe protists: a morphological, ultrastructural, and molecular study on <i>Peritromus kahli</i> Villeneuve-Brachon, 1940 (Ciliophora, Heterotrichea). <i>The Journal of Eukaryotic Microbiology</i> , 51(1), 49–59. https://doi.org/10.1111/j.1550-7408.2004.tb00160.x

AJ54921 0.1	<i>Euplotes magnicirratu</i> s	Spirotrichea	Euplotia	Marine/Brackish	Vannini, C., Rosati, G., Verni, F., & Petroni, G. (2004). Identification of the bacterial endosymbionts of the marine ciliate <i>Euplotes magnicirratu</i> s (Ciliophora, Hypotrichia) and proposal of 'Candidatus Devosia euplotis'. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 54(Pt 4), 1151–1156. https://doi.org/10.1099/ijs.0.02759-0
AJ62825 0.2	<i>Strombidinopsis jeokjo</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Jeong, H. J., Kim, J. S., Kim, S., Song, J. Y., Lee, I., & Lee, G. H. (2004). <i>Strombidinopsis jeokjo</i> n. sp. (ciliophora: choreotrichida) from the coastal waters off western Korea: morphology and small subunit ribosomal DNA gene sequence. <i>Journal of Eukaryotic Microbiology</i> , 51(4), 451-455.
AJ78664 8.1	<i>Parastrombidinopsis shimii</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Kim, J. S., Jeong, H. J., Strueder-Kypke, M. C., Lynn, D. H., Kim, S., Kim, J. H. & Lee, S. H. (2005). <i>Parastrombidinopsis shimii</i> n. gen., n. sp. (Ciliophora: Choreotrichia) from the coastal waters of Korea: morphology and small subunit ribosomal DNA sequence. <i>Journal of Eukaryotic Microbiology</i> , 52(6), 514-522. https://doi.org/10.1111/j.1550-7408.2005.00062.x
AJ81007 5.1	<i>Bromeliophrya brasiliensis</i>	Oligohymenophorea	-	Freshwater	Foissner, W., Struder-Kypke, M., van der Staay, G. W. M., Moon-van der Staay, S.-Y., & Hackstein, J. H. P. (2003). Endemic ciliates (Protozoa, Ciliophora) from tank bromeliads (Bromeliaceae): a combined morphological, molecular, and ecological study. <i>European Journal of Protistology</i> , 39(4), 365-372. https://doi.org/10.1078/0932-4739-00005
AJ81007 7.1	<i>Glaucomides bromelicola</i>	Oligohymenophorea	-	Freshwater	Foissner, W., Struder-Kypke, M., van der Staay, G. W. M., Moon-van der Staay, S.-Y., & Hackstein, J. H. P. (2003). Endemic ciliates (Protozoa, Ciliophora) from tank bromeliads (Bromeliaceae): a combined morphological, molecular, and ecological study. <i>European Journal of Protistology</i> , 39(4), 365-372. https://doi.org/10.1078/0932-4739-00005
AJ81007 8.1	<i>Lambornella trichoglossa</i>	Oligohymenophorea	-	Freshwater	Foissner, W., Struder-Kypke, M., van der Staay, G. W. M., Moon-van der Staay, S.-Y., & Hackstein, J. H. P. (2003). Endemic ciliates (Protozoa, Ciliophora) from tank bromeliads (Bromeliaceae): a combined morphological, molecular, and ecological study. <i>European Journal of Protistology</i> , 39(4), 365-372. https://doi.org/10.1078/0932-4739-00005
AJ87701 4.1	<i>Strombidinopsis acuminata</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Kim, Y.-O., Kim, S. Y., Lee, W.-J., & Choi, J. K. (2010). New Observations on the Choreotrich Ciliate <i>Strombidinopsis acuminata</i> Faure ´-Fremiet 1924, and Comparison with <i>Strombidinopsis jeokjo</i> Jeong et al., 2004. <i>Journal of Eukaryotic Microbiology</i> , 57(1), 48–55. https://doi.org/10.1111/j.1550-7408.2009.00446.x
AM07262 1.1	<i>Apofrontonia dohrni</i>	Oligohymenophorea	-	Marine/Brackish	Fokin, S. I., Andreoli, I., Verni, F., & Petroni, G. (2006). <i>Apofrontonia dohrni</i> sp. n. and the phylogenetic relationships within Peniculia (Protista, Ciliophora, Oligohymenophorea). <i>Zoologica Scripta</i> , 35(4), 289–300. https://doi.org/10.1111/j.1463-6409.2006.00231.x

AM07262 2.1	<i>Frontonia leucas</i>	Oligohymenophorea	Peniculia	Freshwater	Fokin, S. I., Andreoli, I., Verni, F., & Petroni, G. (2006). <i>Apofrontonia dohrni</i> sp. n. and the phylogenetic relationships within Peniculia (Protista, Ciliophora, Oligohymenophorea). <i>Zoologica Scripta</i> , 35(4), 289–300. https://doi.org/10.1111/j.1463-6409.2006.00231.x
AM15844 0.1	<i>Anoploidium monacanthum</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15844 3.1	<i>Entodinium dubardi</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15844 4.1	<i>Entodinium caudatum</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15844 8.1	<i>Entodinium bursa</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15844 9.1	<i>Entodinium nanellum</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15845 0.1	<i>Entodinium furca monolobum</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15845 7.1	<i>Diploplastron affine</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15846 0.1	<i>Ostracodinium dentatum</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15846 2.1	<i>Enoploplastron triloricatum</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15846 4.1	<i>Metadinium medium</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15846 6.1	<i>Entodinium simplex</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15846 7.1	<i>Ophryoscolex caudatus</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15846 8.1	<i>Ostracodinium gracile</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15846 9.1	<i>Eremoplastron rostratum</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.

AM15847 2.1	<i>Eremoplastron dilobum</i>	Litostomatea	Trichostomat ia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM15847 3.1	<i>Eremoplastron neglectum</i>	Litostomatea	Trichostomat ia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AM23609 4.1	<i>Paramecium duboscqui</i>	Oligohymenop horea	Peniculia	Marine/Brac kish	Schrallhammer, M., Fokin, S. I., Schleifer, K. H., & Petroni, G. (2006). Molecular characterization of the obligate endosymbiont " <i>Caedibacter macronucleorum</i> " Fokin and Görtz, 1993 and of its host <i>Paramecium duboscqui</i> strain Ku4-8. <i>The Journal of Eukaryotic Microbiology</i> , 53(6), 499–506. https://doi.org/10.1111/j.1550-7408.2006.00133.x
AM29231 2.1	<i>Coleps spetai</i>	Prostomatea	-	Freshwater	Barth, D., Tischer, K., Berger, H., Schlegel, M., & Berendonk, T. U. (2008). High mitochondrial haplotype diversity of <i>Coleps</i> sp. (Ciliophora: Prostomatida). <i>Environmental Microbiology</i> , 10 (3), 626–634. https://doi.org/10.1111/j.1462-2920.2007.01486.x
AM29231 3.1	<i>Coleps nolandi</i>	Prostomatea	-	Freshwater	Barth, D., Tischer, K., Berger, H., Schlegel, M., & Berendonk, T. U. (2008). High mitochondrial haplotype diversity of <i>Coleps</i> sp. (Ciliophora: Prostomatida). <i>Environmental Microbiology</i> , 10 (3), 626–634. https://doi.org/10.1111/j.1462-2920.2007.01486.x
AM29549 5.1	<i>Chattonidium setense</i>	Heterotrichea	-	Marine/Brac kish	Modeo, L., Rosati, G., Andreoli, I., Gabrielli, S., Verni, F., & Petroni, G. (2006). Molecular systematics and ultrastructural characterization of a forgotten species: <i>Chattonidium setense</i> (Ciliophora, Heterotrichea). <i>Proceedings of the Japan Academy. Series B, Physical and Biological Sciences</i> , 82(9), 359–374. https://doi.org/10.2183/pjab.82.359
AM39819 9.1	<i>Spirostomum teres</i>	Heterotrichea	-	Freshwater	Schmidt, S. L., Treuner, T., Schlegel, M., & Bernhard, D. (2007). Multiplex PCR approach for species detection and differentiation within the genus <i>Spirostomum</i> (Ciliophora, Heterotrichea). <i>Protist</i> , 158(2), 139–145. https://doi.org/10.1016/j.protis.2006.11.005
AM39820 0.1	<i>Spirostomum minus</i>	Heterotrichea	-	Freshwater	Schmidt, S. L., Treuner, T., Schlegel, M., & Bernhard, D. (2007). Multiplex PCR approach for species detection and differentiation within the genus <i>Spirostomum</i> (Ciliophora, Heterotrichea). <i>Protist</i> , 158(2), 139–145. https://doi.org/10.1016/j.protis.2006.11.005
AM39820 1.1	<i>Spirostomum ambiguum</i>	Heterotrichea	-	Freshwater	Schmidt, S. L., Treuner, T., Schlegel, M., & Bernhard, D. (2007). Multiplex PCR approach for species detection and differentiation within the genus <i>Spirostomum</i> (Ciliophora, Heterotrichea). <i>Protist</i> , 158(2), 139–145. https://doi.org/10.1016/j.protis.2006.11.005
AM41276 5.1	<i>Hemicycliostyla franzi</i>	Spirotrichea	Stichotrichia	Freshwater	Schmidt, S. L., Bernhard, D., Schlegel, M., & Foissner, W. (2007). Phylogeny of the Stichotrichia (Ciliophora; Spirotrichea) reconstructed with nuclear small subunit rRNA gene sequences: discrepancies and accordances with morphological data. <i>The Journal of Eukaryotic Microbiology</i> , 54(2), 201–209. https://doi.org/10.1111/j.1550-7408.2007.00250.x

AM41276 7.1	<i>Oxytricha elegans</i>	Spirotrichea	Hypotrichia	Terrestrial	Schmidt, S. L., Bernhard, D., Schlegel, M., & Foissner, W. (2007). Phylogeny of the Stichotrichia (Ciliophora; Spirotrichea) reconstructed with nuclear small subunit rRNA gene sequences: discrepancies and accordances with morphological data. <i>The Journal of Eukaryotic Microbiology</i> , 54(2), 201–209. https://doi.org/10.1111/j.1550-7408.2007.00250.x
AM41277 3.1	<i>Heterourosomoida lanceolata</i>	Spirotrichea	Stichotrichia	Terrestrial	Schmidt, S. L., Bernhard, D., Schlegel, M., & Foissner, W. (2007). Phylogeny of the Stichotrichia (Ciliophora; Spirotrichea) reconstructed with nuclear small subunit rRNA gene sequences: discrepancies and accordances with morphological data. <i>The Journal of Eukaryotic Microbiology</i> , 54(2), 201–209. https://doi.org/10.1111/j.1550-7408.2007.00250.x
AM41277 4.1	<i>Amphisiella magnigranulos</i>	Spirotrichea	Hypotrichia	Terrestrial	Schmidt, S. L., Bernhard, D., Schlegel, M., & Foissner, W. (2007). Phylogeny of the Stichotrichia (Ciliophora; Spirotrichea) reconstructed with nuclear small subunit rRNA gene sequences: discrepancies and accordances with morphological data. <i>The Journal of Eukaryotic Microbiology</i> , 54(2), 201–209. https://doi.org/10.1111/j.1550-7408.2007.00250.x
AM71318 4.1	<i>Blepharisma hyalinum</i>	Heterotrichea	-	Terrestrial	Foissner, W., Agatha, S., & Berger, H. (2002). Soil Ciliates (Protozoa, Ciliophora) from Namibia (Southwest Africa), with Emphasis on Two Contrasting Environments, the Etosha Region and the Namib Desert. <i>Denisia</i> , 5, 1-1459.
AM71318 5.1	<i>Blepharisma japonicum</i>	Heterotrichea	-	Freshwater	Fernandes, N. M., Paiva, T. S., Silva-Neto, I. D., Schlegel, M., & Schrago, C. G. (2016). Expanded phylogenetic analyses of the class Heterotrichea (Ciliophora, Postciliodesmatophora) using five molecular markers and morphological data. <i>Molecular Phylogenetics and Evolution</i> , 95, 229–246. http://dx.doi.org/10.1016/j.ympev.2015.10.030
AM71318 6.1	<i>Blepharisma elongatum</i>	Heterotrichea	-	Freshwater	Schmidt, S. L., Foissner, W., Schlegel, M., & Bernhard, D. (2007). Molecular phylogeny of the Heterotrichea (Ciliophora, Postciliodesmatophora) based on small subunit rRNA gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 54(4), 358–363. https://doi.org/10.1111/j.1550-7408.2007.00269.x
AM71318 7.1	<i>Blepharisma steini</i>	Heterotrichea	-	Terrestrial	Schmidt, S. L., Foissner, W., Schlegel, M., & Bernhard, D. (2007). Molecular phylogeny of the Heterotrichea (Ciliophora, Postciliodesmatophora) based on small subunit rRNA gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 54(4), 358–363. https://doi.org/10.1111/j.1550-7408.2007.00269.x
AM94603 1.1	<i>Loxodes striatus</i>	Karyorelictea	-	Freshwater	Andreoli, I., Mangini, L., Ferrantini, F., Santangelo, G., Verni, F., & Petroni, G. (2009). Molecular phylogeny of unculturable Karyorelictea (Alveolata, Ciliophora). <i>Zoologica Scripta</i> , 38 (6), 651-662. https://doi.org/10.1111/j.1463-6409.2009.00395.x
AY00477 2.1	<i>Euplotes vannus</i>	Spirotrichea	Euplotia	Marine/Brackish	Chen, Z., & Song, W. (2002). Phylogenetic Positions of <i>Aspidisca steini</i> and <i>Euplotes vannus</i> within the Order Euplotida (Hypotrichia: Ciliophora) Inferred from Complete Small Subunit Ribosomal RNA Gene Sequences. <i>Acta Protozoologica</i> , 41, 1-9.

AY00744 6.1	<i>Heliophrya erhardi</i>	Phyllopharyng ea	Suctorina	Freshwater	Spoon, D. M., Chapman, G. B., Cheng, R. S., & Zane, S. F. (1976). Observations on the Behavior and Feeding Mechanisms of the Suctorian <i>Heliophrya erhardi</i> (Rieder) Matthes Preying on Paramecium. <i>Transactions of the American Microscopical Society</i> , 95, 443. doi:10.2307/3225137
AY00745 1.1	<i>Heterometopus palaeformis</i>	Armophorea	-	Freshwater	Foissner, W., Agatha, S., & Berger, H. (2002). Soil Ciliates (Protozoa, Ciliophora) from Namibia (Southwest Africa), with Emphasis on Two Contrasting Environments, the Etosha Region and the Namib Desert. <i>Denisia</i> , 5, 1-1459.
AY10217 3.1	<i>Hemiophrys macrostoma</i>	Litostomatea	Haptoria	Symbiosis	Arthur, J. R., & Te, B. Q. (2006). Checklist of the Parasites of fishes of Viet Nam. FAO Fisheries Technical Paper. No. 369/2. Rome, FAO
AY10217 4.1	<i>Tokophrya quadripartita</i>	Phyllopharyng ea	Suctorina	Freshwater	Ramírez-Ballesteros, M., & Mayén-Estrada, R. (2019). Suctorians (Ciliophora: Suctorina) as epibionts of decapods of families Cambaridae and Pseudothelphusidae. <i>Zootaxa</i> , 4648(2), 384-392. https://doi.org/10.11646/zootaxa.4648.2.11
AY10217 5.1	<i>Hemiophrys procera</i>	Litostomatea	Haptoria	Freshwater	Foissner, W., & Berger, H. (1996). A user-friendly guide to the ciliates (Protozoa, Ciliophora) commonly used by hydrobiologists as bioindicators in rivers, lakes, and waste waters, with notes on their ecology. <i>Freshwater Biology</i> , 35(2), 375-482. https://doi.org/10.1111/j.1365-2427.1996.tb01775.x
AY14356 0.1	<i>Tintinnopsis fimbriata</i>	Spirotrichea	Choreotrichi a	Marine/Brack ish	Strüder-Kypke, M., & Lynn, D. (2003). Sequence analyses of the small subunit rRNA gene confirm the paraphyly of oligotrich ciliates sensu lato and support the monophyly of the subclasses Oligotrichia and Choreotrichia (Ciliophora, Spirotrichea). <i>Journal of Zoology</i> , 260(1), 87-97. doi:10.1017/S0952836903003546
AY14356 1.1	<i>Tintinnopsis tocatinensis</i>	Spirotrichea	Choreotrichi a	Marine/Brack ish	Strüder-Kypke, M., & Lynn, D. (2003). Sequence analyses of the small subunit rRNA gene confirm the paraphyly of oligotrich ciliates sensu lato and support the monophyly of the subclasses Oligotrichia and Choreotrichia (Ciliophora, Spirotrichea). <i>Journal of Zoology</i> , 260(1), 87-97. doi:10.1017/S0952836903003546
AY14356 2.1	<i>Tintinnopsis dadayi</i>	Spirotrichea	Choreotrichi a	Marine/Brack ish	Strüder-Kypke, M., & Lynn, D. (2003). Sequence analyses of the small subunit rRNA gene confirm the paraphyly of oligotrich ciliates sensu lato and support the monophyly of the subclasses Oligotrichia and Choreotrichia (Ciliophora, Spirotrichea). <i>Journal of Zoology</i> , 260(1), 87-97. doi:10.1017/S0952836903003546
AY14356 6.1	<i>Rhabdonella hebe</i>	Spirotrichea	Choreotrichi a	Marine/Brack ish	Strüder-Kypke, M., & Lynn, D. (2003). Sequence analyses of the small subunit rRNA gene confirm the paraphyly of oligotrich ciliates sensu lato and support the monophyly of the subclasses Oligotrichia and Choreotrichia (Ciliophora, Spirotrichea). <i>Journal of Zoology</i> , 260(1), 87-97. doi:10.1017/S0952836903003546
AY14357 1.1	<i>Codonellopsis americana</i>	Spirotrichea	Choreotrichi a	Marine/Brack ish	Strüder-Kypke, M., & Lynn, D. (2003). Sequence analyses of the small subunit rRNA gene confirm the paraphyly of oligotrich ciliates sensu lato and support the monophyly of the subclasses Oligotrichia and Choreotrichia (Ciliophora, Spirotrichea). <i>Journal of Zoology</i> , 260(1), 87-97. doi:10.1017/S0952836903003546

AY14357 3.1	<i>Strobilidium caudatum</i>	Spirotrichea	Choreotrichi a	Freshwater	Strüder-Kypke, M., & Lynn, D. (2003). Sequence analyses of the small subunit rRNA gene confirm the paraphyly of oligotrich ciliates sensu lato and support the monophyly of the subclasses Oligotrichia and Choreotrichia (Ciliophora, Spirotrichea). <i>Journal of Zoology</i> , 260(1), 87-97. doi:10.1017/S0952836903003546
AY18792 4.1	<i>Parduczia orbis</i>	Karyorelictea	-	Marine/Brackish	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AY18792 5.1	<i>Geleia fossata</i>	Karyorelictea	-	Marine/Brackish	Rosati, G. (2001) Ectosymbiosis in Ciliated Protozoa. In: Seckbach J. (eds) Symbiosis. Cellular Origin, Life in Extreme Habitats and Astrobiology. <i>Springer</i> , 4, Dordrecht. https://doi.org/10.1007/0-306-48173-1_30
AY18793 2.1	<i>Geleia simplex</i>	Karyorelictea	-	Marine/Brackish	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AY18793 3.1	<i>Geleia swedmarkii</i>	Karyorelictea	-	Marine/Brackish	Azovsky, A., Saburova, M., Tikhonenkov., Khazanova, K., Esaulov, A., & Mazei, Y. (2013). Composition, diversity and distribution of microbenthos across the intertidal zones of Ryazhkov Island (the White Sea). <i>European Journal of Protistology</i> , 49, 500-515. http://dx.doi.org/10.1016/j.ejop.2013.05.002
AY21772 7.1	<i>Protocruzia adherens</i>	Protocruzidea	Protocruziida	Marine/Brackish	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AY24211 9.1	<i>Isochona sp</i>	Phyllopharyng ea	-	Symbiosis	Snoeyenbos-West, O. L., Cole, J., Campbell, A., Coats, D. W., & Katz, L. A. (2004). Molecular phylogeny of phyllopharyngean ciliates and their group I introns. <i>The Journal of Eukaryotic Microbiology</i> , 51(4), 441-450. https://doi.org/10.1111/j.1550-7408.2004.tb00392.x
AY25712 5.1	<i>Strombidium rassoulzadegani</i>	Spirotrichea	Oligotrichia	Marine/Brackish	McManus, G. B., Xu, D., Costas, B. A., & Katz, L. A. (2010). Genetic identities of Cryptic species in the <i>Strombidium stylifer/apolatatum/oculatum</i> cluster, including a description of <i>Strombidium rassoulzadegani</i> n. sp. <i>The Journal of Eukaryotic Microbiology</i> , 57(4), 369-378. https://doi.org/10.1111/j.1550-7408.2010.00485.x
AY33179 1.1	<i>Chlamydodon excocellatus</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brackish	Snoeyenbos-West, O. L., Cole, J., Campbell, A., Coats, D. W., & Katz, L. A. (2004). Molecular phylogeny of phyllopharyngean ciliates and their group I introns. <i>The Journal of Eukaryotic Microbiology</i> , 51(4), 441-450. https://doi.org/10.1111/j.1550-7408.2004.tb00392.x
AY33180 2.1	<i>Prodiscophrya sp</i>	Phyllopharyng ea	-	-	-
AY37811 2.1	<i>Dysteria derouxi</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brackish	Gong, J., & Song, W. (2004). Description of a new marine cyrtophorid ciliate, <i>Dysteria derouxi</i> nov. spec., with an updated key to 12 well-investigated <i>Dysteria</i> species (Ciliophora, Cyrtophorida). <i>European Journal of Protistology</i> , 40, 13-19. https://doi.org/10.1016/j.ejop.2003.07.002

AY38082 3.1	<i>Bandia deveneyi</i>	Litostomatea	Trichostomatia	Symbiosis	Cameron, S. L., & O'Donoghue, P. J. (2004). Phylogeny and biogeography of the "Australian" trichostomes (Ciliophora: Litostomata). <i>Protist</i> , 155(2), 215–235. https://doi.org/10.1078/143446104774199600
AY49865 1.1	<i>Hemiurosoma terricola</i>	Spirotrichea	Stichotrichia	Terrestrial	Foissner, W., Moon-van der Staay, S. Y., van der Staay, G. W. M., Hackstein, J. H. P., Krautgartner, W.-D., & Berger, H. (2004). Reconciling classical and molecular phylogenies in the stichotrichines (Ciliophora, Spirotrichea), including new sequences from some rare species. <i>European Journal of Protistology</i> , 40, 265–281. https://doi.org/10.1016/j.ejop.2004.05.004
AY49865 2.1	<i>Onychodromopsis flexilis</i>	Spirotrichea	Hypotrichia	Freshwater	Foissner, W., Moon-van der Staay, S. Y., van der Staay, G. W. M., Hackstein, J. H. P., Krautgartner, W.-D., & Berger, H. (2004). Reconciling classical and molecular phylogenies in the stichotrichines (Ciliophora, Spirotrichea), including new sequences from some rare species. <i>European Journal of Protistology</i> , 40, 265–281. https://doi.org/10.1016/j.ejop.2004.05.004
AY49865 4.1	<i>Orthamphisiella breviseries</i>	Spirotrichea	Stichotrichia	Terrestrial	Foissner, W., Moon-van der Staay, S. Y., van der Staay, G. W. M., Hackstein, J. H. P., Krautgartner, W.-D., & Berger, H. (2004). Reconciling classical and molecular phylogenies in the stichotrichines (Ciliophora, Spirotrichea), including new sequences from some rare species. <i>European Journal of Protistology</i> , 40, 265–281. https://doi.org/10.1016/j.ejop.2004.05.004
AY49865 5.1	<i>Gonostomum namibiense</i>	Spirotrichea	Stichotrichia	Terrestrial	Foissner, W., Moon-van der Staay, S. Y., van der Staay, G. W. M., Hackstein, J. H. P., Krautgartner, W.-D., & Berger, H. (2004). Reconciling classical and molecular phylogenies in the stichotrichines (Ciliophora, Spirotrichea), including new sequences from some rare species. <i>European Journal of Protistology</i> , 40, 265–281. https://doi.org/10.1016/j.ejop.2004.05.004
AY54168 3.1	<i>Pelagostrobilidium neptuni</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Agatha, S., & Struder-Kypke, M. C. (2005). <i>Pelagostrobilidium neptuni</i> (Montagnes and Taylor, 1994) and <i>Strombidium biarmatum</i> nov. spec. (Ciliophora, Oligotrichia): phylogenetic position inferred from morphology, ontogenesis, and gene sequence data. <i>European Journal of Protistology</i> 41(1), 65–83. https://doi.org/10.1016/j.ejop.2004.09.005
AY54754 5.1	<i>Plagiotoma lumbrici</i>	Spirotrichea	Stichotrichia	Symbiosis	Affa'a, F. M., Hickey, D. A., Strüder-Kypke, M., & Lynn, D. H. (2004). Phylogenetic position of species in the genera <i>Anoplophrya</i> , <i>Plagiotoma</i> , and <i>Nyctotheroides</i> (Phylum Ciliophora), endosymbiotic ciliates of annelids and anurans. <i>The Journal of Eukaryotic Microbiology</i> , 51(3), 301–306. https://doi.org/10.1111/j.1550-7408.2004.tb00570.x
AY63040 5.1	<i>Maristentor dinoferus</i>	Heterotrichia	-	Marine/Brackish	Miao, W., Simpson, A. G., Fu, C., & Lobban, C. S. (2005). The giant zooxanthellae-bearing ciliate <i>Maristentor dinoferus</i> (Heterotrichia) is closely related to folliculinidae. <i>The Journal of Eukaryotic Microbiology</i> , 52(1), 11–16. https://doi.org/10.1111/j.1550-7408.2005.3311r.x

AY77556 6.2	<i>Stentor amethystinus</i>	Heterotrichea	-	Freshwater	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
AY83308 7.1	<i>Pseudocohnilem bus hargisi</i>	Oligohymenop horea	Scuticociliati a	Symbiosis	Song, J. Y., Kitamura, S., Oh, M. J., Kang, H. S., Lee, J. H., Tanaka, S. J., & Jung, S. J. (2009). Pathogenicity of <i>Miamiensis avidus</i> (syn. <i>Philasterides dicentrarchi</i>), <i>Pseudocohnilembus persalinus</i> , <i>Pseudocohnilembus hargisi</i> and <i>Uronema marinum</i> (Ciliophora, Scuticociliatida). <i>Diseases of Aquatic Organisms</i> , 83(2), 133–143. https://doi.org/10.3354/dao02017
AY83566 9.1	<i>Pseudocohnilem bus persalinus</i>	Oligohymenop horea	Scuticociliati a	Symbiosis	Song, J. Y., Kitamura, S., Oh, M. J., Kang, H. S., Lee, J. H., Tanaka, S. J., & Jung, S. J. (2009). Pathogenicity of <i>Miamiensis avidus</i> (syn. <i>Philasterides dicentrarchi</i>), <i>Pseudocohnilembus persalinus</i> , <i>Pseudocohnilembus hargisi</i> and <i>Uronema marinum</i> (Ciliophora, Scuticociliatida). <i>Diseases of Aquatic Organisms</i> , 83(2), 133–143. https://doi.org/10.3354/dao02017
BTU8220 4	<i>Bursaria truncatella</i>	Colpodea	-	Freshwater	Foissner, W. (1993). Colpodea (Ciliophora). Fischer, Stuttgart. <i>Protozoenfauna</i> , 4(:i-x), 1-798.
DQ01931 8.1	<i>Pseudourostyla cristata</i>	Spirotrichea	Stichotrichia	Freshwater	Berger, H. (2006). Monograph of the Urostyloidea (Ciliophora, Hypotricha). <i>Monographiae Biologicae</i> , 85, i–xvi, 1–1304. doi: 10.1007/1-4020-5273-1
DQ05734 6.1	<i>Trachelostyla pediculiformis</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Gong, J., Song, W., Li, L., Shao, C., & Chen, Z. (2006). A new investigation of the marine ciliate, <i>Trachelostyla pediculiformis</i> (Cohn, 1866) Borror, 1972 (Ciliophora, Hypotrichida), with establishment of a new genus, <i>Spirotrachelostyla</i> nov. gen. <i>European Journal of Protistology</i> , 42, 63–73. https://doi.org/10.1016/j.ejop.2005.12.001
DQ05734 7.1	<i>Dysteria procera</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brackish	Li, L., & Song, W. (2006). Phylogenetic Positions of Two Cryptophorid Ciliates, <i>Dysteria procera</i> and <i>Hartmannula derouxi</i> (Ciliophora: Phyllopharyngia: Dysteriida) Inferred from the Complete Small Subunit Ribosomal RNA Gene Sequences. <i>Acta Protozoologica</i> , 45, 265-270.
DQ19046 1.1	<i>Chaenea vorax</i>	Litostomatea	Haptoria	Marine/Brackish	Gao, S., Song, W., Ma, H., Clamp, J. C., Yi, Z., Al-Rasheid, K. A., Chen, Z., & Lin, X. (2008). Phylogeny of six genera of the subclass Haptoria (Ciliophora, Litostomatea) inferred from sequences of the gene coding for small subunit ribosomal RNA. <i>Journal of Eukaryotic Microbiology</i> , 55(6), 562–566. https://doi.org/10.1111/j.1550-7408.2008.00360.x
DQ19046 5.1	<i>Loxophyllum rostratum</i>	Litostomatea	Haptoria	Marine/Brackish	Gao, S., Song, W., Ma, H., Clamp, J. C., Yi, Z., Al-Rasheid, K. A., Chen, Z., & Lin, X. (2008). Phylogeny of six genera of the subclass Haptoria (Ciliophora, Litostomatea) inferred from sequences of the gene coding for small subunit ribosomal RNA. <i>Journal of Eukaryotic Microbiology</i> , 55(6), 562–566. https://doi.org/10.1111/j.1550-7408.2008.00360.x

DQ19046 7.2	<i>Protocruzia contrax</i>	Protocruzia	Protocruziida	Marine/Brackish	Li, L., Thorsten, S., Kyoon, S. M., Al-Rasheid Khaled, A. S., Al-Khedhairi Bdulaziz, A., & Song, W. (2010). <i>Protocruzia</i> , a highly ambiguous ciliate (Protozoa; Ciliophora): very likely an ancestral form for Heterotrichea, Colpodea or Spirotrichea? With reevaluation of its evolutionary position based on multigene analyses. <i>Science China Life Sciences</i> , 53(1), 131–138. https://doi.org/10.1007/s11427-010-0012-9
DQ23276 1.1	<i>Orthodonella apohamatus</i>	Nassophorea	-	Marine/Brackish	Lynn, D. H. (2008). <i>The Ciliated Protozoa: Characterization, classification, and Guide to the Literature</i> , 3 ed. <i>Springer</i> , New York.
DQ30986 8.1	<i>Euplotes elegans</i>	Spirotrichea	Euplotia	Marine/Brackish	Julian Schwarz, M. V., Zuendorf, A., & Stoeck, T. (2007). Morphology, ultrastructure, molecular phylogeny, and autecology of <i>Euplotes elegans</i> Kahl, 1932 (Hypotrichida; Euplotidae) isolated from the anoxic Mariager Fjord, Denmark. <i>The Journal of Eukaryotic Microbiology</i> , 54(2), 125–136. https://doi.org/10.1111/j.1550-7408.2007.00243.x
DQ35385 0.1	<i>Diophrys oligothrix</i>	Spirotrichea	Euplotia	Marine/Brackish	Yi, Z., Song, W., Clamp, J., Chen, Z., Gao, S. and Zhang, Q. (2009) Reconsideration of systematic relationships within the order Euplotida (Protista, Ciliophora) using new sequences of the gene coding for small-subunit rRNA and testing the use of combined data sets to construct phylogenies of the <i>Diophrys</i> -complex. <i>Molecular Phylogenetics & Evolution</i> , 50, 599–607. https://doi.org/10.1016/j.ympev.2008.12.006
DQ39378 6.1	<i>Parastrombidinopsis minima</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Tsai, S. F., Xu, D., Chung, C. C., & Chiang, K. P. (2008). <i>Parastrombidinopsis minima</i> n. sp. (Ciliophora: Oligotrichia) from the coastal waters of northeastern Taiwan: morphology and small subunit ribosomal DNA sequence. <i>The Journal of Eukaryotic Microbiology</i> , 55(6), 567–573. https://doi.org/10.1111/j.1550-7408.2008.00364.x
DQ41185 8.1	<i>Spathidium papilliferum</i>	Litostomatea	Haptoria	Terrestrial	Strüder-Kypke, M. C., Wright, A. D., Foissner, W., Chatzinotas, A., & Lynn, D. H. (2006). Molecular phylogeny of litostome ciliates (Ciliophora, Litostomatea) with emphasis on free-living haptorian genera. <i>Protist</i> , 157(3), 261–278. https://doi.org/10.1016/j.protis.2006.03.003
DQ41185 9.1	<i>Arcuospathidium muscorum</i>	Litostomatea	Haptoria	Terrestrial	Strüder-Kypke, M. C., Wright, A. D., Foissner, W., Chatzinotas, A., & Lynn, D. H. (2006). Molecular phylogeny of litostome ciliates (Ciliophora, Litostomatea) with emphasis on free-living haptorian genera. <i>Protist</i> , 157(3), 261–278. https://doi.org/10.1016/j.protis.2006.03.003
DQ41186 0.1	<i>Arcuospathidium cultriforme</i>	Litostomatea	Haptoria	Terrestrial	Strüder-Kypke, M. C., Wright, A. D., Foissner, W., Chatzinotas, A., & Lynn, D. H. (2006). Molecular phylogeny of litostome ciliates (Ciliophora, Litostomatea) with emphasis on free-living haptorian genera. <i>Protist</i> , 157(3), 261–278. https://doi.org/10.1016/j.protis.2006.03.003

DQ41186 1.1	<i>Enchelys polynucleata</i>	Litostomatea	Haptoria	Terrestrial	Strüder-Kypke, M. C., Wright, A. D., Foissner, W., Chatzinotas, A., & Lynn, D. H. (2006). Molecular phylogeny of litostome ciliates (Ciliophora, Litostomatea) with emphasis on free-living haptorian genera. <i>Protist</i> , 157(3), 261–278. https://doi.org/10.1016/j.protis.2006.03.003
DQ41186 2.1	<i>Spathidium stammeri</i>	Litostomatea	Haptoria	Terrestrial	Strüder-Kypke, M. C., Wright, A. D., Foissner, W., Chatzinotas, A., & Lynn, D. H. (2006). Molecular phylogeny of litostome ciliates (Ciliophora, Litostomatea) with emphasis on free-living haptorian genera. <i>Protist</i> , 157(3), 261–278. https://doi.org/10.1016/j.protis.2006.03.003
DQ41186 3.1	<i>Teuthophrys trisulca</i>	Litostomatea	Haptoria	Terrestrial	Strüder-Kypke, M. C., Wright, A. D., Foissner, W., Chatzinotas, A., & Lynn, D. H. (2006). Molecular phylogeny of litostome ciliates (Ciliophora, Litostomatea) with emphasis on free-living haptorian genera. <i>Protist</i> , 157(3), 261–278. https://doi.org/10.1016/j.protis.2006.03.003
DQ44560 5.1	<i>Condylostentor auriculatus</i>	Heterotrichea	-	Marine/Brackish	Miao, M., Song, W., Clamp, J. C., Al-Rasheid, K. A., Al-Khedhairi, A. A., & Al-Arifi, S. (2009). Further consideration of the phylogeny of some "traditional" heterotrichs (Protista, Ciliophora) of uncertain affinities, based on new sequences of the small subunit rRNA gene. <i>The Journal of Eukaryotic Microbiology</i> , 56(3), 244–250. https://doi.org/10.1111/j.1550-7408.2009.00391.x
DQ48719 6.1	<i>Monodinium sp</i>	Litostomatea	Haptoria	Freshwater	Duff, R. J., Ball, H., & Lavrentyev, P. J. (2008). Application of Combined Morphological–Molecular Approaches to the Identification of Planktonic Protists from Environmental Samples. <i>Journal of Eukaryotic Microbiology</i> , 55 (4), 306–312. https://doi.org/10.1111/j.1550-7408.2008.00328.x
DQ49023 6.1	<i>Rigidothrix goisery</i>	Spirotrichea	Hypotrichia	Terrestrial	Foissner, W., & Stoeck, T. (2006). <i>Rigidothrix goiseri</i> nov. gen., nov. spec. (Rigidotrichidae nov. fam.), a new 'flagship' ciliate from the Niger floodplain breaks the flexibility-dogma in the classification of stichotrichine spirotrichs (Ciliophora, Spirotrichea). <i>European Journal of Protistology</i> , 42(4), 249–267. https://doi.org/10.1016/j.ejop.2006.07.003
DQ50357 8.1	<i>Anteholosticha manca</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Li, L., Song, W., Shin, M. K., Warren, A., Al-Rasheid, K. A. A., Al-Khedhairi, A. A., & Al-Arifi, S. (2009). Reconsideration of the phylogenetic positions of three stichotrichous genera <i>Holosticha</i> , <i>Anteholosticha</i> and <i>Pseudokeronopsis</i> (Spirotrichea: Ciliophora) inferred from complete SSU rRNA gene sequences. <i>Progress in Natural Science</i> , 19(6), 769–773. https://doi.org/10.1016/j.pnsc.2008.06.027
DQ50358 3.1	<i>Pseudoamphisiella alveolata</i>	Spirotrichea	Euplotia	Marine/Brackish	Yi, Z., Song, W., Warren, A., Roberts, D. M., Al-Rasheid, K. A., Chen, Z., Al-Farraj, S. A., & Hu, X. (2008). A molecular phylogenetic investigation of <i>Pseudoamphisiella</i> and <i>Parabirojimia</i> (Protozoa, Ciliophora, Spirotrichea), two genera with ambiguous systematic positions. <i>European Journal of Protistology</i> , 44(1), 45–53. https://doi.org/10.1016/j.ejop.2007.08.002

DQ50358 4.1	<i>Parabirojimia similis</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Yi, Z., Song, W., Warren, A., Roberts, D. M., Al-Rasheid, K. A., Chen, Z., Al-Farraj, S. A., & Hu, X. (2008). A molecular phylogenetic investigation of <i>Pseudoamphisiella</i> and <i>Parabirojimia</i> (Protozoa, Ciliophora, Spirotrichea), two genera with ambiguous systematic positions. <i>European Journal of Protistology</i> , 44(1), 45–53. https://doi.org/10.1016/j.ejop.2007.08.002
DQ64688 0.1	<i>Prodiscocephalus borrori</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Shao, C., Song, W., Li, L., Warren, A., Al-Rasheid, K. A., Al-Quraishy, S. A., Al-Farraj, S. A., & Lin, X. (2008). Systematic position of <i>Discocephalus</i> -like ciliates (Ciliophora: Spirotrichea) inferred from SSU rDNA and ontogenetic information. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 58(Pt 12), 2962–2972. https://doi.org/10.1099/ijls.0.65781-0
DQ66284 8.1	<i>Strombidium apolatum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Xu, D., Song, W., & Hu, X. (2005). Notes on Two Marine Ciliates from the Yellow Sea, China: <i>Placus salinus</i> and <i>Strombidium apolatum</i> (Protozoa, Ciliophora). <i>Journal of Ocean University of China</i> , 4(2), 137-144.
DQ81109 0.1	<i>Varistrombidium kielum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Gao, S., Gong, J., Lynn, D., Lin, X., & Song, W. (2009). An updated phylogeny of oligotrich and choreotrich ciliates (Protozoa, Ciliophora, Spirotrichea) with representative taxa collected from Chinese coastal waters. <i>Systematics and Biodiversity</i> , 7(2), 235-242. https://doi.org/10.1017/S1477200009002989
DQ82248 2.1	<i>Condylostoma minutum</i>	Heterotricha	-	Marine/Brackish	Miao, M., Song, W., Clamp, J. C., Al-Rasheid, K. A., Al-Khedhairi, A. A., & Al-Arifi, S. (2009). Further consideration of the phylogeny of some "traditional" heterotrichs (Protista, Ciliophora) of uncertain affinities, based on new sequences of the small subunit rRNA gene. <i>The Journal of Eukaryotic Microbiology</i> , 56(3), 244–250. https://doi.org/10.1111/j.1550-7408.2009.00391.x
DQ82248 3.1	<i>Condylostoma spatiosum</i>	Heterotricha	-	Marine/Brackish	Miao, M., Song, W., Clamp, J. C., Al-Rasheid, K. A., Al-Khedhairi, A. A., & Al-Arifi, S. (2009). Further consideration of the phylogeny of some "traditional" heterotrichs (Protista, Ciliophora) of uncertain affinities, based on new sequences of the small subunit rRNA gene. <i>The Journal of Eukaryotic Microbiology</i> , 56(3), 244–250. https://doi.org/10.1111/j.1550-7408.2009.00391.x
DQ83226 0.1	<i>Amphisiella annulata</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Berger, H. (2004). <i>Amphisiella annulata</i> (Kahl, 1928) Borror, 1972 (Ciliophora: Hypotricha): Morphology, Notes on Morphogenesis, Review of Literature, and Neotypification. <i>Acta Protozoologica</i> , 43, 1-14.
DQ86473 4.1	<i>Gastrocirrhus monilifer</i>	Spirotrichea	Euplotia	Marine/Brackish	Miao, M., Song, W., Chen, Z., Al-Rasheid, K. A., Shao, C., Jiang, J., & Guo, W. (2007). A unique euplotid ciliate, <i>Gastrocirrhus</i> (Protozoa, Ciliophora): assessment of its phylogenetic position inferred from the small subunit rRNA gene sequence. <i>The Journal of Eukaryotic Microbiology</i> , 54(4), 371–378. https://doi.org/10.1111/j.1550-7408.2007.00271.x

DQ86834 7.1	<i>Vorticella microstoma</i>	Oligohymenophorea	Peritrichia	Freshwater	Sun, P., Clamp, J., Xu, D., Kusuoka, Y., & Miao, W. (2012). <i>Vorticella</i> Linnaeus, 1767 (Ciliophora, Oligohymenophora, Peritrichia) is a grade not a clade: redefinition of <i>Vorticella</i> and the families Vorticellidae and Astylozoidae using molecular characters derived from the gene coding for small subunit ribosomal RNA. <i>Protist</i> , 163(1), 129–142. https://doi.org/10.1016/j.protis.2011.06.005
DQ86835 0.1	<i>Zoothamnium niveum</i>	Oligohymenophorea	Peritrichia	Marine/Brackish	Clamp, J. C., & Williams, D. (2006). A Molecular Phylogenetic Investigation of <i>Zoothamnium</i> (Ciliophora, Peritrichia, Sessilida). <i>Journal of Eukaryotic Microbiology</i> , 53, 494–498. https://doi.org/10.1111/j.1550-7408.2006.00132.x
DQ86835 1.1	<i>Zoothamnium pelagicum</i>	Oligohymenophorea	Peritrichia	Marine/Brackish	Clamp, J. C., & Williams, D. (2006). A Molecular Phylogenetic Investigation of <i>Zoothamnium</i> (Ciliophora, Peritrichia, Sessilida). <i>Journal of Eukaryotic Microbiology</i> , 53, 494–498. https://doi.org/10.1111/j.1550-7408.2006.00132.x
DQ86835 2.1	<i>Zoothamnium alternans</i>	Oligohymenophorea	Peritrichia	Marine/Brackish	Clamp, J. C., & Williams, D. (2006). A Molecular Phylogenetic Investigation of <i>Zoothamnium</i> (Ciliophora, Peritrichia, Sessilida). <i>Journal of Eukaryotic Microbiology</i> , 53, 494–498. https://doi.org/10.1111/j.1550-7408.2006.00132.x
DQ91090 3.2	<i>Strongyloidium pseudocrassum</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Paiva, T. S., Borges, B. N., Harada, M. L., & Silva-Neto, I. D. (2009). Comparative phylogenetic study of Stichotrichia (Alveolata: Ciliophora: Spirotrichea) based on 18S-rDNA sequences. <i>Genetics & Molecular Research</i> : GMR, 8(1), 223–246. https://doi.org/10.4238/vol8-1gmr529
DQ98613 1.1	<i>Rimostrombidium lacustris</i>	Spirotrichea	Choreotrichia	Freshwater	Agatha, S., & Struder-Kypke, M. C. (2007). Phylogeny of the order Choreotrichida (Ciliophora, Spirotricha, Oligotrichia) as inferred from morphology, ultrastructure, ontogenesis, and SSrRNA gene sequences. <i>European Journal of Protistology</i> 43, 37–63. https://doi.org/10.1016/j.ejop.2006.10.001
EF01428 6.1	<i>Epalxella antiquorum</i>	Plagiopylea	-	Freshwater	Stoeck, T., Foissner, W., & Lynn, D. H. (2007). Small-subunit rRNA Phylogenies Suggest That <i>Epalxella antiquorum</i> (penard, 1922) Corliss, 1960 (ciliophora, odontostomatida) is a member of the plagiopylea. <i>The Journal of Eukaryotic Microbiology</i> , 54(5), 436–442. https://doi.org/10.1111/j.1550-7408.2007.00283.x
EF07024 2.1	<i>Tetrahymena americanis</i>	Oligohymenophorea	Hymenostomata	-	-
EF07024 3.1	<i>Tetrahymena asiatica</i>	Oligohymenophorea	Hymenostomata	Freshwater	Chantangsi, C., Lynn, D. H., Brandl, M. T., Cole, J. C., Hetrick, N., & Ikonomi, P. (2007). Barcoding ciliates: a comprehensive study of 75 isolates of the genus <i>Tetrahymena</i> . <i>International Journal of Systematic and Evolutionary Microbiology</i> , 57 (10), 2412–2423. https://doi.org/10.1099/ijs.0.64865-0
EF07024 4.1	<i>Tetrahymena caudata</i>	Oligohymenophorea	Hymenostomata	Freshwater	Chantangsi, C., Lynn, D. H., Brandl, M. T., Cole, J. C., Hetrick, N., & Ikonomi, P. (2007). Barcoding ciliates: a comprehensive study of 75 isolates of the genus <i>Tetrahymena</i> . <i>International Journal of Systematic and Evolutionary Microbiology</i> , 57 (10), 2412–2423. https://doi.org/10.1099/ijs.0.64865-0

EF07024 5.1	<i>Tetrahymena cosmopolitanis</i>	Oligohymenop horea	Hymenostom atia	Freshwater	Chantangsi, C., Lynn, D. H., Brandl, M. T., Cole, J. C., Hetrick, N., & Ikonomi, P. (2007). Barcoding ciliates: a comprehensive study of 75 isolates of the genus <i>Tetrahymena</i> . <i>International Journal of systematic and Evolutionary Microbiology</i> , 57 (10), 2412-2423. https://doi.org/10.1099/ijs.0.64865-0
EF07024 6.1	<i>Tetrahymena elliotti</i>	Oligohymenop horea	Hymenostom atia	Freshwater	Chantangsi, C., Lynn, D. H., Brandl, M. T., Cole, J. C., Hetrick, N., & Ikonomi, P. (2007). Barcoding ciliates: a comprehensive study of 75 isolates of the genus <i>Tetrahymena</i> . <i>International Journal of systematic and Evolutionary Microbiology</i> , 57 (10), 2412-2423. https://doi.org/10.1099/ijs.0.64865-0
EF07024 7.1	<i>Tetrahymena furgasoni</i>	Oligohymenop horea	Hymenostom atia	Freshwater	Nanney, D. L., Park, C., Preparata, R., & Simon, E. M. (1998). Comparison of sequence differences in a variable 23S rRNA domain among sets of cryptic species of ciliated protozoa. <i>The Journal of Eukaryotic Microbiology</i> , 45(1), 91–100. https://doi.org/10.1111/j.1550-7408.1998.tb05075.x
EF07024 8.1	<i>Tetrahymena leucophrys</i>	Oligohymenop horea	Hymenostom atia	-	-
EF07024 9.1	<i>Tetrahymena limacis</i>	Oligohymenop horea	Hymenostom atia	Symbiosis	Michelson, E. (1971). Distribution and pathogenicity of <i>Tetrahymena limacis</i> in the slug <i>Deroceras reticulatum</i> . <i>Parasitology</i> , 62(1), 125-131. https://doi.org/10.1017/S003118200007133X
EF07025 1.1	<i>Tetrahymena mimbres</i>	Oligohymenop horea	Hymenostom atia	Freshwater	Chantangsi, C., Lynn, D. H., Brandl, M. T., Cole, J. C., Hetrick, N., & Ikonomi, P. (2007). Barcoding ciliates: a comprehensive study of 75 isolates of the genus <i>Tetrahymena</i> . <i>International Journal of systematic and Evolutionary Microbiology</i> , 57 (10), 2412-2423. https://doi.org/10.1099/ijs.0.64865-0
EF07025 3.1	<i>Tetrahymena paravorax</i>	Oligohymenop horea	Hymenostom atia	Freshwater	Lynn, D. H., Doerder, F. P., Gillis, P. L., & Prosser, R. S. (2018). <i>Tetrahymena glochidiophila</i> n. sp., a new species of <i>Tetrahymena</i> (Ciliophora) that causes mortality to glochidia larvae of freshwater mussels (Bivalvia). <i>Diseases of Aquatic Organisms</i> , 127(2), 125–136. https://doi.org/10.3354/dao03188
EF07025 5.1	<i>Tetrahymena pyriformis</i>	Oligohymenop horea	Hymenostom atia	Freshwater	Chantangsi, C., Lynn, D. H., Brandl, M. T., Cole, J. C., Hetrick, N., & Ikonomi, P. (2007). Barcoding ciliates: a comprehensive study of 75 isolates of the genus <i>Tetrahymena</i> . <i>International Journal of systematic and Evolutionary Microbiology</i> , 57 (10), 2412-2423. https://doi.org/10.1099/ijs.0.64865-0
EF07025 6.1	<i>Tetrahymena shanghaiensis</i>	Oligohymenop horea	Hymenostom atia	Freshwater	Wang, Y., Zhang, M., Wang, X. (2000). Population growth responses of <i>Tetrahymena shanghaiensis</i> in exposure to rare earth elements. <i>Biological Trace Element Research</i> , 75, 265-275.
EF07025 7.1	<i>Tetrahymena silvana</i>	Oligohymenop horea	Hymenostom atia	Freshwater	Chantangsi, C., Lynn, D. H., Brandl, M. T., Cole, J. C., Hetrick, N., & Ikonomi, P. (2007). Barcoding ciliates: a comprehensive study of 75 isolates of the genus <i>Tetrahymena</i> . <i>International Journal of systematic and Evolutionary Microbiology</i> , 57 (10), 2412-2423. https://doi.org/10.1099/ijs.0.64865-0

EF07026 6.1	<i>Colpidium colpoda</i>	Oligohymenophorea	-	Freshwater	Chantangsi, C., Lynn, D. H., Brandl, M. T., Cole, J. C., Hetrick, N., & Ikonomi, P. (2007). Barcoding ciliates: a comprehensive study of 75 isolates of the genus <i>Tetrahymena</i> . <i>International Journal of Systematic and Evolutionary Microbiology</i> , 57 (10), 2412-2423. https://doi.org/10.1099/ijs.0.64865-0
EF09496 1.1	<i>Euplotes focardii</i>	Spirotrichea	Euplotia	Marine/Brackish	Vallesi, A., Giuseppe, G. D., Dini, F., & Luporini, P. (2008). Pheromone evolution in the protozoan ciliate, <i>Euplotes</i> : the ability to synthesize diffusible forms is ancestral and secondarily lost. <i>Molecular Phylogenetics & Evolution</i> , 47(1), 439-442. https://doi.org/10.1016/j.ympev.2007.11.025
EF09496 4.1	<i>Euplotes patella</i>	Spirotrichea	Euplotia	Freshwater	Madoni, P. (2011). Protozoa in wastewater treatment processes: A minireview. <i>Italian Journal of Zoology</i> , 78(1), 3-11. https://doi.org/10.1080/11250000903373797
EF09496 5.1	<i>Euplotes bisulcatus</i>	Spirotrichea	Euplotia	Marine/Brackish	Vallesi, A., Giuseppe, G. D., Dini, F., & Luporini, P. (2008). Pheromone evolution in the protozoan ciliate, <i>Euplotes</i> : the ability to synthesize diffusible forms is ancestral and secondarily lost. <i>Molecular Phylogenetics & Evolution</i> , 47(1), 439-442. https://doi.org/10.1016/j.ympev.2007.11.025
EF09496 6.1	<i>Euplotes plicatum</i>	Spirotrichea	Euplotia	Marine/Brackish	Chen, X., Zhao, Y., Al-Farraj, S. A., Al-Quraishy, S. A., El-Serehy, H. A., Shao, C., & Al-Rasheid, K. A. S. (2013). Taxonomic Descriptions of Two Marine Ciliates, <i>Euplotes dammamensis</i> n. sp. and <i>Euplotes balteatus</i> (Dujardin, 1841) Kahl, 1932 (Ciliophora, Spirotrichea, Euplotida), Collected from the Arabian Gulf, Saudi Arabia. <i>Acta Protozoologica</i> , 52, 73-89. https://doi.org/10.4467/16890027AP.13.008.1087
EF12370 4.1	<i>Aspidisca aculeata</i>	Spirotrichea	Euplotia	Marine/Brackish	Yi, Z., Song, W., Clamp, J., Chen, Z., Gao, S. and Zhang, Q. (2009) Reconsideration of systematic relationships within the order Euplotida (Protista, Ciliophora) using new sequences of the gene coding for small-subunit rRNA and testing the use of combined data sets to construct phylogenies of the <i>Diophrys</i> -complex. <i>Molecular Phylogenetics & Evolution</i> , 50, 599-607. https://doi.org/10.1016/j.ympev.2008.12.006
EF12370 8.2	<i>Loxophyllum jini</i>	Litostomatea	Haptoria	Marine/Brackish	Gao, S., Song, W., Ma, H., Clamp, J. C., Yi, Z., Al-Rasheid, K. A., Chen, Z., & Lin, X. (2008). Phylogeny of six genera of the subclass Haptoria (Ciliophora, Litostomatea) inferred from sequences of the gene coding for small subunit ribosomal RNA. <i>Journal of Eukaryotic Microbiology</i> , 55(6), 562-566. https://doi.org/10.1111/j.1550-7408.2008.00360.x
EF12370 9.1	<i>Tintinnopsis beroidea</i>	Spirotrichea	Choreotricha	Marine/Brackish	Hu, X., Lin, X., & Song, W. (2019). Ciliate Atlas: Species Found in the South China Sea. <i>Science Press</i> , Beijing, 1-936. https://doi.org/10.1007/978-981-13-5901-9

EF15884 8.1	<i>Homalogastra setosa</i>	Oligohymenophorea	Scuticociliata	Terrestrial	Liu, M., Wang, C., Hu, X., Qu, Z., Jiang, L., Al-Farraj, S. A., El-Serehy, H. A., Warren, A., & Song, W. (2020). Taxonomy and Molecular Phylogeny of Three Species of Scuticociliates From China: <i>Citrihris smalli</i> gen. nov., sp. nov., <i>Homalogastra binucleata</i> sp. nov. and <i>Uronema orientalis</i> Pan et al., 2015 (Protozoa, Ciliophora, Oligohymenophorea), With the Proposal of a New Family, Citrihrisidae fam. nov. <i>Frontiers in Marine Science</i> , 7, 604704. https://doi.org/10.3389/fmars.2020.604704
EF19866 7.1	<i>Uronychia binucleata</i>	Spirotrichea	Euplotia	Marine/Brackish	Kim, S.-J., & Min, G.-S. (2011). First Record of Three Uronychia Species (Ciliophora: Spirotrichea: Euplotida) from Korea. <i>The Korean Journal of Systematic Zoology</i> , 27(1), 25-33. https://doi.org/10.5635/KJSZ.2011.27.1.025
EF19866 9.1	<i>Uronychia setigera</i>	Spirotrichea	Euplotia	Marine/Brackish	Hu, X., Lin, X., & Song, W. (2019). Ciliate Atlas: Species Found in the South China Sea. <i>Science Press</i> , Beijing, 1-936. https://doi.org/10.1007/978-981-13-5901-9
EF41783 4.1	<i>Opisthonecta minima</i>	Oligohymenophorea	Peritrichia	Freshwater	Williams, D., & Clamp, J. C. (2007). A molecular phylogenetic investigation of Opisthonecta and related genera (Ciliophora, Peritrichia, Sessilida). <i>Journal of Eukaryotic Microbiol</i> , 54 (3), 317-323. https://doi.org/10.1111/j.1550-7408.2007.00262.x
EF41783 5.2	<i>Telotrochidium matiense</i>	Oligohymenophorea	Peritrichia	Freshwater	Martín-Cereceda, M., Guinea, A., Bonaccorso, E., Dyal, P., Novarino, G., & Foissner, W. (2007). Classification of the peritrich ciliate <i>Opisthonecta matiensis</i> (Martín-Cereceda et al. 1999) as <i>Telotrochidium matiense</i> nov. comb., based on new observations and SSU rDNA phylogeny. <i>European Journal of Protistology</i> , 43(4), 265–279. https://doi.org/10.1016/j.ejop.2007.04.003
EF42812 8.1	<i>Tetrahymena tropicalis</i>	Oligohymenophorea	Hymenostomatia	Freshwater	Chaudhry, R., & Shakoobi, A. R. (2011). Identification of a New Copper Resistant Protist Isolate <i>Tetrahymena</i> RT-1 subsp. Nov. <i>Pakistan Journal of Zoology</i> , 43 (4), 781-788.
EF48686 0.1	<i>Chaenea teres</i>	Litostomatea	Haptoria	Marine/Brackish	Gao, S., Song, W., Ma, H., Clamp, J. C., Yi, Z., Al-Rasheid, K. A., Chen, Z., & Lin, X. (2008). Phylogeny of six genera of the subclass Haptoria (Ciliophora, Litostomatea) inferred from sequences of the gene coding for small subunit ribosomal RNA. <i>Journal of Eukaryotic Microbiology</i> , 55(6), 562–566. https://doi.org/10.1111/j.1550-7408.2008.00360.x
EF48686 1.1	<i>Diophryopsis hystrix</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Shao, C., Zhang, Q., Al-Rasheid, K. A., Warren, A., & Song, W. (2010). Ontogenesis and molecular phylogeny of the marine ciliate <i>Diophryopsis hystrix</i> : implications for the systematics of the <i>Diophrys</i> -like species (ciliophora, spirotrichea, euplotida). <i>The Journal of Eukaryotic Microbiology</i> , 57(1), 33–39. https://doi.org/10.1111/j.1550-7408.2009.00442.x

EF48686 5.1	<i>Psammomitra retractilis</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Yi, Z., Song, W., Stoeck, T., Al-Rasheid, K. A. S., Al-Khedhairi, A. A., Gong, J., Ma, H., & Chen, Z. (2009). Phylogenetic analyses suggest that <i>Psammomitra</i> (Ciliophora, Urostylelida) should represent an urostylelid family, based on small subunit rRNA and alpha-tubulin gene sequence information. <i>Zoological Journal of the Linnean Society</i> , 157, 227-236. https://doi.org/10.1111/j.1096-3642.2008.00524.x
EF49250 4.1	<i>Karenia brevis</i>	Dinophyceae (Dinoflagellata)	Outgroup	-	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The All-Data-Based Evolutionary Hypothesis of Ciliated Protists with a Revised Classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 1-14. https://doi.org/10.1038/srep24874
EF50204 5.1	<i>Paramecium tetraurelia</i>	Oligohymenophorea	Peniculia	Freshwater	Shuja, R. N., & Shakoory, R. A. (2009). Identification and cloning of first cadmium metallothionein like gene from locally isolated ciliate, <i>Paramecium</i> sp. <i>Molecular Biology Reports</i> , 36, 549-560. https://doi.org/10.1007/s11033-008-9213-8
EF62382 7.1	<i>Hartmannula sinica</i>	Phyllopharyngia	Phyllopharyngia	Marine/Brackish	Shao, C., Song, W., & Gong, J. (2008). Morphology and morphogenesis of a new marine cyrtophorid ciliate, <i>Hartmannula sinica</i> nov. spec. (Protozoa, Ciliophora, Cyrtophorida) from China. <i>European Journal of Protistology</i> , 44(1), 1-12. https://doi.org/10.1016/j.ejop.2007.05.001
EF63207 4.1	<i>Tripalmaria dogieli</i>	Litostomatea	Trichostomata	Symbiosis	Strüder-Kypke, M. C., Kornilova, O. A., & Lynn, D. H. (2007). Phylogeny of trichostome ciliates (Ciliophora, Litostomatea) endosymbiotic in the Yakut horse (<i>Equus caballus</i>). <i>European Journal of Protistology</i> , 43(4), 319-328. https://doi.org/10.1016/j.ejop.2007.06.005
EF63207 5.1	<i>Paraisotricha colpoidea</i>	Litostomatea	Trichostomata	Symbiosis	Strüder-Kypke, M. C., Kornilova, O. A., & Lynn, D. H. (2007). Phylogeny of trichostome ciliates (Ciliophora, Litostomatea) endosymbiotic in the Yakut horse (<i>Equus caballus</i>). <i>European Journal of Protistology</i> , 43(4), 319-328. https://doi.org/10.1016/j.ejop.2007.06.005
EF63207 6.1	<i>Cycloposthium ishikawai</i>	Litostomatea	Trichostomata	Symbiosis	Strüder-Kypke, M. C., Kornilova, O. A., & Lynn, D. H. (2007). Phylogeny of trichostome ciliates (Ciliophora, Litostomatea) endosymbiotic in the Yakut horse (<i>Equus caballus</i>). <i>European Journal of Protistology</i> , 43(4), 319-328. https://doi.org/10.1016/j.ejop.2007.06.005
EF63207 7.1	<i>Cycloposthium edentatum</i>	Litostomatea	Trichostomata	Symbiosis	Strüder-Kypke, M. C., Kornilova, O. A., & Lynn, D. H. (2007). Phylogeny of trichostome ciliates (Ciliophora, Litostomatea) endosymbiotic in the Yakut horse (<i>Equus caballus</i>). <i>European Journal of Protistology</i> , 43(4), 319-328. https://doi.org/10.1016/j.ejop.2007.06.005
EF63207 8.1	<i>Cochliatoxum periachtum</i>	Litostomatea	Trichostomata	Symbiosis	Strüder-Kypke, M. C., Kornilova, O. A., & Lynn, D. H. (2007). Phylogeny of trichostome ciliates (Ciliophora, Litostomatea) endosymbiotic in the Yakut horse (<i>Equus caballus</i>). <i>European Journal of Protistology</i> , 43(4), 319-328. https://doi.org/10.1016/j.ejop.2007.06.005

EF69081 0.1	<i>Euplotes trisulcatus</i>	Spirotrichea	Euplotia	Marine/Brackish	Carter, H. P. (1972). Infraciliature of eleven species of the genus <i>Euplotes</i> . <i>Transactions of the American Microscopical Society</i> , 91 (4), 466-492.
EU03988 4.1	<i>Bardeliella pulchra</i>	Colpodea	-	Terrestrial	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316-327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03988 6.1	<i>Bryometopus atypicus</i>	Colpodea	-	Terrestrial	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316-327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03988 7.1	<i>Bryometopus pseudochilodon</i>	Colpodea	-	Terrestrial	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316-327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03989 2.1	<i>Colpoda aspera</i>	Colpodea	-	Freshwater	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316-327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03989 3.1	<i>Colpoda cucullus</i>	Colpodea	-	Terrestrial	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316-327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03989 4.1	<i>Colpoda henneguyi</i>	Colpodea	-	Terrestrial	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316-327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03989 6.1	<i>Colpoda magna</i>	Colpodea	-	Freshwater	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316-327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03989 7.1	<i>Colpoda minima</i>	Colpodea	-	Terrestrial	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316-327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03989 8.1	<i>Cyrtolophosis mucicola</i>	Colpodea	-	Terrestrial	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316-327. https://doi.org/10.1016/j.ympev.2007.08.006

EU03990 0.1	<i>Hausmanniella discoidea</i>	Colpodea	-	Freshwater	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316–327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03990 1.1	<i>Ilsiella palustris</i>	Colpodea	-	Terrestrial	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316–327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03990 2.1	<i>Mykophagophrys terricola</i>	Colpodea	-	Terrestrial	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316–327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03990 3.1	<i>Notoxoma parabryophryides</i>	Colpodea	-	Terrestrial	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316–327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03990 4	<i>Ottowphyra dragescoi</i>	Colpodea	-	Terrestrial	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316–327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03990 5.1	<i>Platyophrya bromelicola</i>	Colpodea	-	Freshwater	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316–327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03990 7.1	<i>Rostrophrya sp</i>	Colpodea	-	Terrestrial	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316–327. https://doi.org/10.1016/j.ympev.2007.08.006
EU03990 8.1	<i>Sagittaria sp</i>	Colpodea	-	Terrestrial	Dunthorn, M., Foissner, W., & Katz, L. A. (2008). Molecular phylogenetic analysis of class Colpodea (phylum Ciliophora) using broad taxon sampling. <i>Molecular Phylogenetics and Evolution</i> , 46, 316–327. https://doi.org/10.1016/j.ympev.2007.08.006
EU07947 2.1	<i>Kahliella matis</i>	Spirotrichea	-	Terrestrial	Vďačný, P., Tirjaková, E., Tóthová, T., Pristaš, P., & Javorský, P. (2010). Morphological and phylogenetical studies on a new soil hypotrich ciliate: <i>Kahliella matisi</i> spec. nov. (Hypotrichia, Kahliellidae). <i>European Journal of Protistology</i> , 46(4), 319–333. https://doi.org/10.1016/j.ejop.2010.08.001

EU12466 9.1	<i>Neokeronopsis aurea</i>	Spirotrichea	Stichotrichia	Terrestrial	Foissner, W., & Stoeck, T. (2008). Morphology, Ontogenesis and Molecular Phylogeny of <i>Neokeronopsis (Afrokeronopsis) aurea</i> nov. subgen., nov. spec. (Ciliophora: Hypotricha), a New African Flagship Ciliate Confirms the CEUU Hypothesis. <i>Acta Protozoologica</i> , 47, 1-33.
EU18906 8.1	<i>Diophrys apoligothrix</i>	Spirotrichea	Euplotia	Marine/Brackish	Song, W., Shao, C., Yi, Z., Li, L., Warren, A., Al-Rasheid, K., & Yang, J. (2009). The morphology, morphogenesis and SSrRNA gene sequence of a new marine ciliate, <i>Diophrys apoligothrix</i> spec. nov. (Ciliophora; Euplotida). <i>European Journal of Protistology</i> , 45(1), 38–50. https://doi.org/10.1016/j.ejop.2008.06.002
EU18907 1.1	<i>Paradiophrys imgard</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Yi, Z., Song, W., Clamp, J., Chen, Z., Gao, S. and Zhang, Q. (2009) Reconsideration of systematic relationships within the order Euplotida (Protista, Ciliophora) using new sequences of the gene coding for small-subunit rRNA and testing the use of combined data sets to construct phylogenies of the <i>Diophrys</i> -complex. <i>Molecular Phylogenetics & Evolution</i> , 50, 599–607. https://doi.org/10.1016/j.ympev.2008.12.006
EU22022 6.1	<i>Thigmokeronopsis stoecki</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Yi, Z., Song, W., Shao, C., Warren, A., Al-Rasheid, K. A., Roberts, D. M., Miao, M., Al-Quraishy, S. A., & Chen, Z. (2008). Phylogeny of some systematically uncertain urostyloids-- <i>Apokeronopsis</i> , <i>Metaurostyloopsis</i> , <i>Thigmokeronopsis</i> (Ciliophora, Stichotrichia) estimated with small subunit rRNA gene sequence information: discrepancies and agreements with morphological data. <i>European Journal of Protistology</i> , 44(4), 254–262. https://doi.org/10.1016/j.ejop.2007.12.002
EU22022 7.1	<i>Metaurostyloopsis sinica</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Yi, Z., Song, W., Shao, C., Warren, A., Al-Rasheid, K. A., Roberts, D. M., Miao, M., Al-Quraishy, S. A., & Chen, Z. (2008). Phylogeny of some systematically uncertain urostyloids-- <i>Apokeronopsis</i> , <i>Metaurostyloopsis</i> , <i>Thigmokeronopsis</i> (Ciliophora, Stichotrichia) estimated with small subunit rRNA gene sequence information: discrepancies and agreements with morphological data. <i>European Journal of Protistology</i> , 44(4), 254–262. https://doi.org/10.1016/j.ejop.2007.12.002
EU22022 9.1	<i>Metaurostyloopsis salina</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Yi, Z., Song, W., Shao, C., Warren, A., Al-Rasheid, K. A., Roberts, D. M., Miao, M., Al-Quraishy, S. A., & Chen, Z. (2008). Phylogeny of some systematically uncertain urostyloids-- <i>Apokeronopsis</i> , <i>Metaurostyloopsis</i> , <i>Thigmokeronopsis</i> (Ciliophora, Stichotrichia) estimated with small subunit rRNA gene sequence information: discrepancies and agreements with morphological data. <i>European Journal of Protistology</i> , 44(4), 254–262. https://doi.org/10.1016/j.ejop.2007.12.002
EU24250 8.1	<i>Phialina salinarum</i>	Litostomatea	Haptoria	Marine/Brackish	Gao, S., Song, W., Ma, H., Clamp, J. C., Yi, Z., Al-Rasheid, K. A., Chen, Z., & Lin, X. (2008). Phylogeny of six genera of the subclass Haptoria (Ciliophora, Litostomatea) inferred from sequences of the gene coding for small subunit ribosomal RNA. <i>Journal of Eukaryotic Microbiology</i> , 55(6), 562–566. https://doi.org/10.1111/j.1550-7408.2008.00360.x

EU24250 9.1	<i>Litonotus paracygnus</i>	Litostomatea	Haptoria	Marine/Brackish	Gao, S., Song, W., Ma, H., Clamp, J. C., Yi, Z., Al-Rasheid, K. A., Chen, Z., & Lin, X. (2008). Phylogeny of six genera of the subclass Haptoria (Ciliophora, Litostomatea) inferred from sequences of the gene coding for small subunit ribosomal RNA. <i>Journal of Eukaryotic Microbiology</i> , 55(6), 562–566. https://doi.org/10.1111/j.1550-7408.2008.00360.x
EU24251 0.1	<i>Amphileptus aeschtae</i>	Litostomatea	Haptoria	Marine/Brackish	Gao, S., Song, W., Ma, H., Clamp, J. C., Yi, Z., Al-Rasheid, K. A., Chen, Z., & Lin, X. (2008). Phylogeny of six genera of the subclass Haptoria (Ciliophora, Litostomatea) inferred from sequences of the gene coding for small subunit ribosomal RNA. <i>Journal of Eukaryotic Microbiology</i> , 55(6), 562–566. https://doi.org/10.1111/j.1550-7408.2008.00360.x
EU26456 0.1	<i>Colpodidium caudatum</i>	Nassophorea	-	Terrestrial	Breiner, H-W., Foissner, W., & Stoeck, T. (2008). The search finds an end: colpodidiids belong to the Class Nassophorea (ciliophora). <i>Journal of Eukaryotic Microbiology</i> , 55 (2), 100-102. doi: 10.1111/j.1550-7408.2008.00307.x
EU26456 2.1	<i>Aristerostoma marinum</i>	Colpodea	-	Marine/Brackish	Dunthorn, M., Eppinger, M., Schwarz, M. V. J., Schweikert, M., Boenigk, J., Katz, L. A., & Stoeck, T. (2009). Phylogenetic placement of the Cyrtolophosididae Stokes, 1888 (Ciliophora; Colpodea) and neotypification of <i>Aristerostoma marinum</i> Kahl, 1931. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 59, 167–180. https://doi.org/10.1099/ijs.0.000935-0
EU26456 4.1	<i>Pseudocyrtolophos alpestris</i>	Colpodea	-	Terrestrial	Dunthorn, M., Eppinger, M., Schwarz, M. V. J., Schweikert, M., Boenigk, J., Katz, L. A., & Stoeck, T. (2009). Phylogenetic placement of the Cyrtolophosididae Stokes, 1888 (Ciliophora; Colpodea) and neotypification of <i>Aristerostoma marinum</i> Kahl, 1931. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 59, 167–180. https://doi.org/10.1099/ijs.0.000935-0
EU26792 9.1	<i>Uronychia multicirrus</i>	Spirotrichea	Euplotia	Marine/Brackish	Shen, Z., Shao, C., Gao, S., Lin, X., Li, J., Hu, X., & Song, W. (2009). Description of the rare marine ciliate, <i>Uronychia multicirrus</i> Song, 1997 (Ciliophora; Euplotida) based on morphology, morphogenesis and SS rRNA gene sequence. <i>The Journal of Eukaryotic Microbiology</i> , 56(3), 296–304. https://doi.org/10.1111/j.1550-7408.2009.00409.x
EU26793 0.1	<i>Diophrys parappendiculata</i>	Spirotrichea	Euplotia	Marine/Brackish	Yi, Z., Song, W., Clamp, J., Chen, Z., Gao, S. and Zhang, Q. (2009) Reconsideration of systematic relationships within the order Euplotida (Protista, Ciliophora) using new sequences of the gene coding for small-subunit rRNA and testing the use of combined data sets to construct phylogenies of the <i>Diophrys</i> -complex. <i>Molecular Phylogenetics & Evolution</i> , 50, 599–607. https://doi.org/10.1016/j.ympev.2008.12.006

EU27520 2.1	<i>Caryotricha minuta</i>	Spirotrichea	Protohypotrichia	Marine/Brackish	Miao, M., Shao, C., Jiang, J., Li, L., Stoeck, T., & Song, W. (2009). <i>Caryotricha minuta</i> (Xu et al., 2008) nov. comb., a unique marine ciliate (Protista, Ciliophora, Spirotrichea), with phylogenetic analysis of the ambiguous genus <i>Caryotricha</i> inferred from the small-subunit rRNA gene sequence. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 59(Pt 2), 430–438. https://doi.org/10.1099/ijs.0.65855-0
EU28681 2.1	<i>Zosterodasys transverses</i>	Nassophorea	-	Marine/Brackish	Wang, L., Zhao, Y., & Gong, J. (2012). Resdescription of two synhymeniid ciliates, <i>Chilodontopsis simplex</i> Ozaki & Yagiu, 1941 and <i>Zosterodasys transverses</i> (Kahl, 1928) Foissner et al., 1994 (Alveolata, Ciliophora, Phyllopharyngea). <i>Zootaxa</i> , 3167, 45-52. https://doi.org/10.5281/zenodo.279782
EU37993 9.1	<i>Condylostoma curva</i>	Heterotrichea	-	Marine/Brackish	Guo, W., Song, W., Al-Rasheid, K. A. S., Shao, C., Miao, M., Al-Farraj, S. A., Al-Qurishy, S. A., Chen, Z., Yi, Z., & Gao, S. (2008). Phylogenetic Position of Three <i>Condylostoma</i> Species Inferred from Small Subunit rRNA Gene Sequences. <i>Progress in Natural Science</i> , 18(9), 1089-1093. https://doi.org/10.1016/j.pnsc.2008.04.003
EU39952 9.1	<i>Meseres corlissi</i>	Spirotrichea	Stichotrichia	Freshwater	Weisse, T., Strüder-Kypke, M. C., Berger, H., & Foissner, W. (2008). Genetic, morphological, and ecological diversity of spatially separated clones of <i>Meseres corlissi</i> Petz & Foissner, 1992 (Ciliophora, Spirotrichea). <i>The Journal of Eukaryotic Microbiology</i> , 55(4), 257–270. https://doi.org/10.1111/j.1550-7408.2008.00330.x
EU39953 0.1	<i>Amphorellopsis acuta</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Strüder-Kypke, M. C., & Lynn, D. H. ((2008). Morphological versus molecular data – Phylogeny of tintinnid ciliates (Ciliophora, Choreotrichia) inferred from small subunit rRNA gene sequences. <i>Denisia</i> , 23, 417-424
EU39953 1.1	<i>Codonella apicata</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Strüder-Kypke, M. C., & Lynn, D. H. ((2008). Morphological versus molecular data – Phylogeny of tintinnid ciliates (Ciliophora, Choreotrichia) inferred from small subunit rRNA gene sequences. <i>Denisia</i> , 23, 417-424
EU39953 2.1	<i>Dictyocysta reticulata</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Strüder-Kypke, M. C., & Lynn, D. H. ((2008). Morphological versus molecular data – Phylogeny of tintinnid ciliates (Ciliophora, Choreotrichia) inferred from small subunit rRNA gene sequences. <i>Denisia</i> , 23, 417-424
EU39953 6.1	<i>Salpingella acuminata</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Strüder-Kypke, M. C., & Lynn, D. H. ((2008). Morphological versus molecular data – Phylogeny of tintinnid ciliates (Ciliophora, Choreotrichia) inferred from small subunit rRNA gene sequences. <i>Denisia</i> , 23, 417-424
EU39953 7.1	<i>Steenstrupiella steenstrupii</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Strüder-Kypke, M. C., & Lynn, D. H. ((2008). Morphological versus molecular data – Phylogeny of tintinnid ciliates (Ciliophora, Choreotrichia) inferred from small subunit rRNA gene sequences. <i>Denisia</i> , 23, 417-424
EU39954 1.1	<i>Tintinnopsis subacuta</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Strüder-Kypke, M. C., & Lynn, D. H. ((2008). Morphological versus molecular data – Phylogeny of tintinnid ciliates (Ciliophora, Choreotrichia) inferred from small subunit rRNA gene sequences. <i>Denisia</i> , 23, 417-424

EU43074 5.1	<i>Aspidisca orthopogon</i>	Spirotrichea	Euplotia	Marine/Brackish	Jiang, J., Zhang, Q., Warren, A., Al-Rasheid, K. A., & Song, W. (2010). Morphology and SSU rRNA gene-based phylogeny of two marine <i>Euplotes</i> species, <i>E. orientalis</i> spec. nov. and <i>E. raikovi</i> (Ciliophora, Euplotida). <i>European Journal of Protistology</i> , 46(2), 121-132. https://doi.org/10.1016/j.ejop.2009.11.003
EU50353 4.1	<i>Gymnodinioides pitelkae</i>	Oligohymenophorea	-	Symbiosis	Clamp, J. C., Bradbury, P. C., Struder-Kypke, M. C., & Lynn, D. H. (2008). Phylogenetic position of the apostome ciliates (Phylum Ciliophora, Subclass Apostomatia) tested using small subunit rRNA gene sequences. <i>Denisia</i> , 23, 395-402.
EU50353 7.1	<i>Hyalophysa chattoni</i>	Oligohymenophorea	-	Symbiosis	Clamp, J. C., Bradbury, P. C., Struder-Kypke, M. C., & Lynn, D. H. (2008). Phylogenetic position of the apostome ciliates (Phylum Ciliophora, Subclass Apostomatia) tested using small subunit rRNA gene sequences. <i>Denisia</i> , 23, 395-402.
EU50353 8.1	<i>Hyalophysa lwoffii</i>	Oligohymenophorea	-	Symbiosis	Clamp, J. C., Bradbury, P. C., Struder-Kypke, M. C., & Lynn, D. H. (2008). Phylogenetic position of the apostome ciliates (Phylum Ciliophora, Subclass Apostomatia) tested using small subunit rRNA gene sequences. <i>Denisia</i> , 23, 395-402.
EU50353 9.1	<i>Vampyrophrya pelagica</i>	Oligohymenophorea	-	Symbiosis	Clamp, J. C., Bradbury, P. C., Struder-Kypke, M. C., & Lynn, D. H. (2008). Phylogenetic position of the apostome ciliates (Phylum Ciliophora, Subclass Apostomatia) tested using small subunit rRNA gene sequences. <i>Denisia</i> , 23, 395-402.
EU51841 6.1	<i>Pseudoamphisiella quadrinucleata</i>	Spirotrichea	Euplotia	Marine/Brackish	Shen, Z., Lin, X., Long, H., Miao, M., Liu, H., Al-Rasheid, K. A., & Song, W. (2008). Morphology and small subunit rDNA gene sequence of <i>Pseudoamphisiella quadrinucleata</i> n. sp. (Ciliophora, Urostylida) from the South China Sea. <i>The Journal of Eukaryotic Microbiology</i> , 55(6), 510-514. https://doi.org/10.1111/j.1550-7408.2008.00355.x
EU57194 4.1	<i>Pseudoamphisiella elongata</i>	Spirotrichea	Euplotia	Marine/Brackish	Li, L., Song, W., Al-Rasheid, K. A. S., Warren, A., Li, Z., Xu, Y., & Shao, C. (2010). Morphology and morphogenesis of a new marine hypotrichous ciliate (Protozoa, Ciliophora, Pseudoamphisiellidae), including a report on the small subunit rRNA gene sequence. <i>Zoological Journal of the Linnean Society</i> , 158 (2), 231-243. https://doi.org/10.1111/j.1096-3642.2009.00546.x
EU58399 0.1	<i>Climacostomum virens</i>	Heterotrichea	-	Marine/Brackish	Miao, M., Song, W., Clamp, J. C., Al-Rasheid, K. A., Al-Khedhairy, A. A., & Al-Arifi, S. (2009). Further consideration of the phylogeny of some "traditional" heterotrichs (Protista, Ciliophora) of uncertain affinities, based on new sequences of the small subunit rRNA gene. <i>The Journal of Eukaryotic Microbiology</i> , 56(3), 244-250. https://doi.org/10.1111/j.1550-7408.2009.00391.x

EU58399 1.1	<i>Fabrea salina</i>	Heterotrichea	-	Marine/Brackish	Miao, M., Song, W., Clamp, J. C., Al-Rasheid, K. A., Al-Khedhairi, A. A., & Al-Arifi, S. (2009). Further consideration of the phylogeny of some "traditional" heterotrichs (Protista, Ciliophora) of uncertain affinities, based on new sequences of the small subunit rRNA gene. <i>The Journal of Eukaryotic Microbiology</i> , 56(3), 244–250. https://doi.org/10.1111/j.1550-7408.2009.00391.x
EU58399 2.1	<i>Folliculina sp</i>	Heterotrichea	-	Marine/Brackish	Miao, M., Song, W., Clamp, J. C., Al-Rasheid, K. A., Al-Khedhairi, A. A., & Al-Arifi, S. (2009). Further consideration of the phylogeny of some "traditional" heterotrichs (Protista, Ciliophora) of uncertain affinities, based on new sequences of the small subunit rRNA gene. <i>The Journal of Eukaryotic Microbiology</i> , 56(3), 244–250. https://doi.org/10.1111/j.1550-7408.2009.00391.x
EU58399 3.1	<i>Peritromus faurei</i>	Heterotrichea	-	Marine/Brackish	Miao, M., Song, W., Clamp, J. C., Al-Rasheid, K. A., Al-Khedhairi, A. A., & Al-Arifi, S. (2009). Further consideration of the phylogeny of some "traditional" heterotrichs (Protista, Ciliophora) of uncertain affinities, based on new sequences of the small subunit rRNA gene. <i>The Journal of Eukaryotic Microbiology</i> , 56(3), 244–250. https://doi.org/10.1111/j.1550-7408.2009.00391.x
EU60018 0.1	<i>Ephelota gemmipara</i>	Phyllopharyng ea	Suctorina	Marine/Brackish	Chen, X., Miao, M., Song, W., Warren, A., Al-Rasheid, K. A. S., Al-Farraj, S. A., & Al-Quraishy, S. A. (2008). Redescriptions of Two Poorly Known Marine Suctorian Ciliates, <i>Ephelota truncata</i> Fraipont, 1878 and <i>Ephelota mammillata</i> Dons, 1918 (Protozoa, Ciliophora, Suctorina), from Qingdao, China. <i>Acta Protozoologica</i> , 47, 247-256.
EU60018 1.1	<i>Ephelota mammillata</i>	Phyllopharyng ea	Suctorina	Marine/Brackish	Chen, X., Miao, M., Song, W., Warren, A., Al-Rasheid, K. A. S., Al-Farraj, S. A., & Al-Quraishy, S. A. (2008). Redescriptions of Two Poorly Known Marine Suctorian Ciliates, <i>Ephelota truncata</i> Fraipont, 1878 and <i>Ephelota mammillata</i> Dons, 1918 (Protozoa, Ciliophora, Suctorina), from Qingdao, China. <i>Acta Protozoologica</i> , 47, 247-256.
EU60018 2.1	<i>Ephelota truncata</i>	Phyllopharyng ea	Suctorina	Marine/Brackish	Chen, X., Miao, M., Song, W., Warren, A., Al-Rasheid, K. A. S., Al-Farraj, S. A., & Al-Quraishy, S. A. (2008). Redescriptions of Two Poorly Known Marine Suctorian Ciliates, <i>Ephelota truncata</i> Fraipont, 1878 and <i>Ephelota mammillata</i> Dons, 1918 (Protozoa, Ciliophora, Suctorina), from Qingdao, China. <i>Acta Protozoologica</i> , 47, 247-256.
EU68474 6.1	<i>Paradisocoephalus elongatus</i>	Spirotrichea	Euplotia	Marine/Brackish	Li, L., Song, W., Al-Rasheid, K. A. S., Warren, A., Roberts, D., Gong, J., Zhang, Q., Wang, Y., & Hu, X. (2008). Two Discocephalid Ciliates, <i>Paradisocoephalus elongatus</i> nov. gen., nov. spec. and <i>Discocephalus ehrenbergi</i> Dragesco, 1960, from the Yellow Sea, China (Ciliophora, Hypotrichida, Discocephalidae). <i>Acta Protozoologica</i> , 47, 353-362.

EU88059 7.1	<i>Aspidisca leptaspis</i>	Spirotrichea	Euplotia	Marine/Brackish	Yi, Z., Song, W., Clamp, J., Chen, Z., Gao, S. and Zhang, Q. (2009) Reconsideration of systematic relationships within the order Euplotida (Protista, Ciliophora) using new sequences of the gene coding for small-subunit rRNA and testing the use of combined data sets to construct phylogenies of the <i>Diophrys</i> -complex. <i>Molecular Phylogenetics & Evolution</i> , 50, 599–607. https://doi.org/10.1016/j.ympev.2008.12.006
EU88059 8.1	<i>Aspidisca magna</i>	Spirotrichea	Euplotia	Marine/Brackish	Yi, Z., Song, W., Clamp, J., Chen, Z., Gao, S. and Zhang, Q. (2009) Reconsideration of systematic relationships within the order Euplotida (Protista, Ciliophora) using new sequences of the gene coding for small-subunit rRNA and testing the use of combined data sets to construct phylogenies of the <i>Diophrys</i> -complex. <i>Molecular Phylogenetics & Evolution</i> , 50, 599–607. https://doi.org/10.1016/j.ympev.2008.12.006
EU93004 8.1	<i>Apokeronopsis ovalis</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Shao, C., Miao, M., Li, L., Song, W., Al-Rasheid, K. A., Al-Quraishy, S. A., & Al-Farraj, S. A. (2008). Morphogenesis and Morphological Redescription of a Poorly Known Ciliate <i>Apokeronopsis ovalis</i> (Kahl, 1932) nov. comb. (Ciliophora: Urostylelida). <i>Acta Protozoologica</i> , 47, 363-376
FJ00872 1.1	<i>Epiclintes auricularis</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Hu, X., Hu, X., Ma, H., Yi, Z., Li, Z., Al-Rasheid, K. A. S., Al-Arifi, S., Al-Khedhairi, A. A., & Song, W. (2009). Reconsideration on the Phylogenetic Position of <i>Epiclintes</i> (Ciliophora, Stichotrichia) Based on SSrRNA Gene Sequence and Morphogenetic Data. <i>Acta Protozoologica</i> , 48, 203-211.
FJ00892 6.1	<i>Zosterodasys agamalievi</i>	Nassophorea	-	Marine/Brackish	Kivimaki, K. L., Bowditch, B. M., Riordan, G. P., & Lipscomb, D. L. (2009). Phylogeny and systematic position of <i>Zosterodasys</i> (Ciliophora, Synhymeniida): a combined analysis of ciliate relationships using morphological and molecular data. <i>The Journal of Eukaryotic Microbiology</i> , 56(4), 323–338. https://doi.org/10.1111/j.1550-7408.2009.00403.x
FJ15610 4.1	<i>Parabirojimia multinucleata</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Chen, X., Gao, S., Song, W., Al-Rasheid, K. A. S., Warren, A., Gong, J., & Lin, X. (2010). <i>Parabirojimia multinucleata</i> spec. nov. and <i>Anteholosticha scutellum</i> (Cohn, 1866) Berger, 2003, marine ciliates (Ciliophora, Hypotrichida) from tropical waters in southern China, with notes on their small-subunit rRNA gene sequences. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 60 (1), 234-243. https://doi.org/10.1099/ijs.0.008037-0
FJ15610 5.1	<i>Anteholosticha scutellum</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Chen, X., Gao, S., Song, W., Al-Rasheid, K. A. S., Warren, A., Gong, J., & Lin, X. (2010). <i>Parabirojimia multinucleata</i> spec. nov. and <i>Anteholosticha scutellum</i> (Cohn, 1866) Berger, 2003, marine ciliates (Ciliophora, Hypotrichida) from tropical waters in southern China, with notes on their small-subunit rRNA gene sequences. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 60 (1), 234-243. https://doi.org/10.1099/ijs.0.008037-0

FJ19607 2.1	<i>Codonellopsis nipponica</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Li, Z., Yi, Z., Yang, J., Gong, J., Clamp, J. C., Al-Rasheid, K. A. S., Al-Arifi, S., Al-Khedhairy, A. A., & Song, W. (2009). Phylogenetic investigation on five genera of tintinnid ciliates (Ciliophora, Choreotrichia), based on the small subunit ribosomal RNA gene sequences. <i>Progress in Natural Science</i> , 19, 1097-1101. https://doi.org/10.1016/j.pnsc.2008.11.011
FJ19607 3.1	<i>Schmidingerella taraikaensis</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Li, Z., Yi, Z., Yang, J., Gong, J., Clamp, J. C., Al-Rasheid, K. A. S., Al-Arifi, S., Al-Khedhairy, A. A., & Song, W. (2009). Phylogenetic investigation on five genera of tintinnid ciliates (Ciliophora, Choreotrichia), based on the small subunit ribosomal RNA gene sequences. <i>Progress in Natural Science</i> , 19, 1097-1101. https://doi.org/10.1016/j.pnsc.2008.11.011
FJ19607 4.1	<i>Stenosemella nivalis</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Li, Z., Yi, Z., Yang, J., Gong, J., Clamp, J. C., Al-Rasheid, K. A. S., Al-Arifi, S., Al-Khedhairy, A. A., & Song, W. (2009). Phylogenetic investigation on five genera of tintinnid ciliates (Ciliophora, Choreotrichia), based on the small subunit ribosomal RNA gene sequences. <i>Progress in Natural Science</i> , 19, 1097-1101. https://doi.org/10.1016/j.pnsc.2008.11.011
FJ19607 6.1	<i>Tintinnopsis lohmanni</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Li, Z., Yi, Z., Yang, J., Gong, J., Clamp, J. C., Al-Rasheid, K. A. S., Al-Arifi, S., Al-Khedhairy, A. A., & Song, W. (2009). Phylogenetic investigation on five genera of tintinnid ciliates (Ciliophora, Choreotrichia), based on the small subunit ribosomal RNA gene sequences. <i>Progress in Natural Science</i> , 19, 1097-1101. https://doi.org/10.1016/j.pnsc.2008.11.011
FJ19639 7.1	<i>Discocephalus ehrenbergi</i>	Spirotrichea	Euplotia	Marine/Brackish	Li, L., Song, W., Al-Rasheid, K. A. S., Warren, A., Roberts, D., Gong, J., Zhang, Q., Wang, Y., & Hu, X. (2008). Two Discocephalid Ciliates, <i>Paradisiscocephalus elongatus</i> nov. gen., nov. spec. and <i>Discocephalus ehrenbergi</i> Dragesco, 1960, from the Yellow Sea, China (Ciliophora, Hypotrichida, Discocephalidae). <i>Acta Protozoologica</i> , 47, 353-362.
FJ34656 8.1	<i>Euplotes parabalteatus</i>	Spirotrichea	Euplotia	Marine/Brackish	Yi, Z., Song, W., Clamp, J., Chen, Z., Gao, S. and Zhang, Q. (2009) Reconsideration of systematic relationships within the order Euplotida (Protista, Ciliophora) using new sequences of the gene coding for small-subunit rRNA and testing the use of combined data sets to construct phylogenies of the <i>Diophrys</i> -complex. <i>Molecular Phylogenetics & Evolution</i> , 50, 599-607. https://doi.org/10.1016/j.ympev.2008.12.006
FJ34656 9.1	<i>Euplotes encysticus</i>	Spirotrichea	Euplotia	Marine/Brackish	Yi, Z., Song, W., Clamp, J., Chen, Z., Gao, S. and Zhang, Q. (2009) Reconsideration of systematic relationships within the order Euplotida (Protista, Ciliophora) using new sequences of the gene coding for small-subunit rRNA and testing the use of combined data sets to construct phylogenies of the <i>Diophrys</i> -complex. <i>Molecular Phylogenetics & Evolution</i> , 50, 599-607. https://doi.org/10.1016/j.ympev.2008.12.006

FJ36175 8.1	<i>Hemicyclostyla sphagni</i>	Spirotrichea	Stichotrichia	Freshwater	Paiva, T., Borges, B., Silva-Neto, I., & Harada, M. L. (2012). Morphology and 18S rDNA phylogeny of <i>Hemicyclostyla sphagni</i> (Ciliophora, Hypotricha) from Brazil with redefinition of the genus <i>Hemicyclostyla</i> . <i>International Journal of Systematic & Evolutionary Microbiology</i> , 62(Pt 1), 229–241. https://doi.org/10.1099/ijs.0.031237-0
FJ37754 6.1	<i>Strombidium sulcatum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Zhang, Q., Yi, Z., Xu, D., Al-Rasheid, K. A. S., Gong, J., & Song, W. (2010). Molecular phylogeny of oligotrich genera <i>Omegastrombidium</i> and <i>Novistrombidium</i> (Protozoa, Ciliophora) for the systematical relationships within Family Strombidiidae. <i>Chinese Journal of Oceanology and Limnology</i> , 28, 769–777. https://doi.org/10.1007/s00343-010-9096-0
FJ37754 7.1	<i>Novistrombidium testaceum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Zhang, Q., Yi, Z., Xu, D., Al-Rasheid, K. A. S., Gong, J., & Song, W. (2010). Molecular phylogeny of oligotrich genera <i>Omegastrombidium</i> and <i>Novistrombidium</i> (Protozoa, Ciliophora) for the systematical relationships within Family Strombidiidae. <i>Chinese Journal of Oceanology and Limnology</i> , 28, 769–777. https://doi.org/10.1007/s00343-010-9096-0
FJ37754 8.1	<i>Nothoholosticha fasciola</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Li, L., Zhang, Q., Hu, X., Warren, A., Al-Rasheid, K. A. S., Al-Khedheiry, A. A., & Song, W. (2009). A redescription of the marine hypotrichous ciliate, <i>Nothoholosticha fasciola</i> (Kahl, 1932) nov. gen., nov. comb. (Ciliophora: Urostyida) with brief notes on its cellular reorganization and SS rRNA gene sequence. <i>European Journal of Protistology</i> , 45, 237–248. https://doi.org/10.1016/j.ejop.2009.01.004
FJ42298 8.1	<i>Novistrombidium orientale</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Gao, S., Gong, J., Lynn, D., Lin, X., & Song, W. (2009). An updated phylogeny of oligotrich and choreotrich ciliates (Protozoa, Ciliophora, Spirotrichea) with representative taxa collected from Chinese coastal waters. <i>Systematics and Biodiversity</i> , 7(2), 235–242. https://doi.org/10.1017/S1477200009002989
FJ42299 0.1	<i>Novistrombidium sinicum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Gao, S., Gong, J., Lynn, D., Lin, X., & Song, W. (2009). An updated phylogeny of oligotrich and choreotrich ciliates (Protozoa, Ciliophora, Spirotrichea) with representative taxa collected from Chinese coastal waters. <i>Systematics and Biodiversity</i> , 7(2), 235–242. https://doi.org/10.1017/S1477200009002989
FJ42299 1.1	<i>Parallelostrombidium obesum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Gao, S., Gong, J., Lynn, D., Lin, X., & Song, W. (2009). An updated phylogeny of oligotrich and choreotrich ciliates (Protozoa, Ciliophora, Spirotrichea) with representative taxa collected from Chinese coastal waters. <i>Systematics and Biodiversity</i> , 7(2), 235–242. https://doi.org/10.1017/S1477200009002989
FJ42299 2.1	<i>Strombidium conicum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Gao, S., Gong, J., Lynn, D., Lin, X., & Song, W. (2009). An updated phylogeny of oligotrich and choreotrich ciliates (Protozoa, Ciliophora, Spirotrichea) with representative taxa collected from Chinese coastal waters. <i>Systematics and Biodiversity</i> , 7(2), 235–242. https://doi.org/10.1017/S1477200009002989

FJ42299 3.1	<i>Pseudotontonia simplicidens</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Gao, S., Gong, J., Lynn, D., Lin, X., & Song, W. (2009). An updated phylogeny of oligotrich and choreotrich ciliates (Protozoa, Ciliophora, Spirotrichea) with representative taxa collected from Chinese coastal waters. <i>Systematics and Biodiversity</i> , 7(2), 235-242. https://doi.org/10.1017/S1477200009002989
FJ42299 4.1	<i>Spirotontonia turbinata</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Gao, S., Gong, J., Lynn, D., Lin, X., & Song, W. (2009). An updated phylogeny of oligotrich and choreotrich ciliates (Protozoa, Ciliophora, Spirotrichea) with representative taxa collected from Chinese coastal waters. <i>Systematics and Biodiversity</i> , 7(2), 235-242. https://doi.org/10.1017/S1477200009002989
FJ42344 8.1	<i>Euplotes sinicus</i>	Spirotrichea	Euplotia	Marine/Brackish	Jiang, J., Zhang, Q., Hu, X., Shao, C., Al-Rasheid, K. A. S., & Song, W. (2010). Two new marine ciliates, <i>Euplotes sinicus</i> sp. nov. and <i>Euplotes parabalteatus</i> sp. nov., and a new small subunit rRNA gene sequence of <i>Euplotes rarisseta</i> (Ciliophora, Spirotrichea, Euplotida). <i>International Journal of Systematic & Evolutionary Microbiology</i> , 60, 1241–1251. https://doi.org/10.1099/ijms.0.012120-0
FJ46147 4.1	<i>Apokeronopsis sinica</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Liu, W., Li, J., Gao, S., Shao, C., Gong, J., Lin, X., Liu, H., & Song, W. (2009). Morphological studies and molecular data on a new marine ciliate, <i>Apokeronopsis sinica</i> n. sp. (Ciliophora: Urostylida), from the South China Sea. <i>Zootaxa</i> , 2005, 57-66. https://doi.org/10.11646/zootaxa.2005.1.5
FJ46374 5.1	<i>Trachelotractus entzi</i>	Litostomatea	Haptoria	Marine/Brackish	Gao, S., Strueder-Kypke, M. C., Al-Rasheid, K. A. S., Lin, X., & Song, W. (2010). Molecular phylogeny of three ambiguous ciliate genera: <i>Kentrophoros</i> , <i>Trachelolophos</i> and <i>Trachelotractus</i> (Alveolata, Ciliophora). <i>Zoologica Scripta</i> , 39(3), 305-313. https://doi.org/10.1111/j.1463-6409.2010.00416.x
FJ46750 5.1	<i>Kentrophoros flavus</i>	Karyorelictea	-	Marine/Brackish	Gao, S., Strueder-Kypke, M. C., Al-Rasheid, K. A. S., Lin, X., & Song, W. (2010). Molecular phylogeny of three ambiguous ciliate genera: <i>Kentrophoros</i> , <i>Trachelolophos</i> and <i>Trachelotractus</i> (Alveolata, Ciliophora). <i>Zoologica Scripta</i> , 39(3), 305-313. https://doi.org/10.1111/j.1463-6409.2010.00416.x
FJ46750 6.1	<i>Kentrophoros gracilis</i>	Karyorelictea	-	Marine/Brackish	Gao, S., Strueder-Kypke, M. C., Al-Rasheid, K. A. S., Lin, X., & Song, W. (2010). Molecular phylogeny of three ambiguous ciliate genera: <i>Kentrophoros</i> , <i>Trachelolophos</i> and <i>Trachelotractus</i> (Alveolata, Ciliophora). <i>Zoologica Scripta</i> , 39(3), 305-313. https://doi.org/10.1111/j.1463-6409.2010.00416.x
FJ59548 8.1	<i>Parauronema virginianum</i>	Oligohymenophorea	-	Symbiosis	Salinas, I., Maas, E. W., & Muñoz, P. (2011). Characterization of acid phosphatases from marine scuticociliate parasites and their activation by host's factors. <i>Parasitology</i> , 138(7), 836–847. https://doi.org/10.1017/S0031182011000527

FJ61025 4.1	<i>Sandmanniella terricola</i>	Colpodea	-	Terrestrial	Foissner, W., & Stoeck, T. (2009). Morphological and Molecular Characterization of a New Protist Family, Sandmanniellidae n. fam. (Ciliophora, Colpodea), with Description of <i>Sandmanniella terricola</i> n. g., n. sp. from the Chobe Floodplain in Botswana. <i>Journal of Eukaryotic Microbiology</i> , 56(5), 472–483. https://doi.org/10.1111/j.1550-7408.2009.00429.x
FJ64835 0.1	<i>Philaster apodigitiformis</i>	Oligohymenophorea	Scuticociliata	Symbiosis	Miao, M., Wang, Y., Li, L., Al-Rasheid, K. A. S., & Song, W. (2009). Molecular phylogeny of the scuticociliate, <i>Philaster</i> (Protozoa, Ciliophora), with a description of a new species, <i>P. apodigitiformis</i> sp. nov., <i>Systematics & Biodiversity</i> , 7(4), 381–388. https://doi.org/10.1017/S1477200009990193
FJ71563 4.1	<i>Spirotontonia taiwanica</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Tsai, S. F., Chen, J. Y., & Chiang, K. P. (2010). <i>Spirotontonia taiwanica</i> n. sp. (Ciliophora: Oligotrichida) from the coastal waters of northeastern Taiwan: morphology and nuclear small subunit rDNA Sequence. <i>The Journal of Eukaryotic Microbiology</i> , 57(5), 429–434. https://doi.org/10.1111/j.1550-7408.2010.00494.x
FJ75402 6.1	<i>Bergeriella ovata</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Liu, W., Shao, C., Gong, J., Li, J., Lin, X., & Song, W. (2010). Morphology, morphogenesis, and molecular phylogeny of a new marine urostyleid ciliate (Ciliophora, Stichotrichia) from the South China Sea, and a brief overview of the convergent evolution of the midventral pattern within the Spirotrichea. <i>Zoological Journal of the Linnean Society</i> , 158, 697–710. https://doi.org/10.1111/j.1096-3642.2009.00565.x
FJ77571 2.1	<i>Anteholosticha azerbaijanica</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Berger, H. (2006). Monograph of the Urostyleloidea (Ciliophora, Hypotricha). <i>Monographiae Biologicae</i> , 85, i–xvi, 1–1304. doi: 10.1007/1-4020-5273-1
FJ77571 6.1	<i>Holosticha bradburyae</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Gong, J., Song, W., Hu, X., Ma, H., & Zhu, M. (2001). Morphology and infraciliature of <i>Holosticha bradburyae</i> nov. spec. (Ciliophora, Hypotrichida) from the Yellow Sea, China. <i>Hydrobiologia</i> , 464, 63–69. https://doi.org/10.1023/A:1013901621439
FJ77571 8.1	<i>Neurostylopsis flavicana</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Wang, Y., Hu, X., Huang, J., Al-Rasheid, K., & Warren, A. (2011). Characterization of two urostyleid ciliates, <i>Metaurostylopsis flavicana</i> spec. nov. and <i>Tunicothrix wilberti</i> (Lin & Song, 2004) Xu et al., 2006 (Ciliophora, Stichotrichia), from a mangrove nature protection area in China. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 61(Pt 7), 1740–1750. https://doi.org/10.1099/ijs.0.024935-0
FJ77572 0.1	<i>Metaurostylopsis cheni</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Song, W., Wilbert, N., Li, L., & Zhang, Q. (2011). Re-evaluation on the diversity of the polyphyletic genus <i>Metaurostylopsis</i> (Ciliophora, Hypotricha): ontogenetic, morphologic, and molecular data suggest the establishment of a new genus <i>Apourostylopsis</i> n. g. <i>The Journal of Eukaryotic Microbiology</i> , 58(1), 11–21. https://doi.org/10.1111/j.1550-7408.2010.00518.x

FJ77572 2.1	<i>Pseudokeronopsis flava</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Yi, Z., Huang, L., Yang, R., Lin, X., & Song, W. (2016). Actin evolution in ciliates (Protist, Alveolata) is characterized by high diversity and three duplication events. <i>Molecular Phylogenetics & Evolution</i> , 96, 45–54. https://doi.org/10.1016/j.ympev.2015.11.024
FJ77572 3.1	<i>Pseudokeronopsis erythrina</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Chen, X., Clamp, J. C., & Song, W. (2011). Phylogeny and systematic revision of the family Pseudokeronopsidae (Protista, Ciliophora, Hypotricha), with description of a new estuarine species of <i>Pseudokeronopsis</i> . <i>Zoologica Scripta</i> , 40, 659–671. https://doi.org/10.1111/j.1463-6409.2011.00492.x
FJ77572 6.1	<i>Monocoronella carnea</i>	Spirotrichea	-	Marine/Brackish	Chen, X., Dong, J., Lin, X., & Al-Rasheid, K. A. S. (2011). Morphology and Phylogeny of a New Urostyleid Ciliate, <i>Monocoronella carnea</i> n. g., n. sp. (Ciliophora, Hypotricha) from Daya Bay, Southern China. <i>Journal of Eukaryotic Microbiology</i> , 58 (6), 497-503. https://doi.org/10.1111/j.1550-7408.2011.00581.x
FJ85821 3.1	<i>Apocoleps magnus</i>	Prostomatea	-	Marine/Brackish	Yi, Z., Dunthorn, M., Song, W., & Stoeck, T. (2010). Increasing taxon sampling using both unidentified environmental sequences and identified cultures improves phylogenetic inference in the Prorodontida (Ciliophora, Prostomatea). <i>Molecular Phylogenetics & Evolution</i> , 57(2), 937–941. https://doi.org/10.1016/j.ympev.2010.08.001
FJ85821 7.1	<i>Tiarina fusa</i>	Armophorea	-	Marine/Brackish	Yi, Z., Dunthorn, M., Song, W., & Stoeck, T. (2010). Increasing taxon sampling using both unidentified environmental sequences and identified cultures improves phylogenetic inference in the Prorodontida (Ciliophora, Prostomatea). <i>Molecular Phylogenetics & Evolution</i> , 57(2), 937–941. https://doi.org/10.1016/j.ympev.2010.08.001
FJ86520 3.1	<i>Leptoamphisiella vermis</i>	Spirotrichea	Euplotia	Marine/Brackish	Miao, M., Shao, C., Chen, X., & Song, W. (2011). Evolution of discocephalid ciliates: molecular, morphological and ontogenetic data support a sister group of discocephalids and pseudoamphisiellids (Protozoa, Ciliophora) with establishment of a new suborder <i>Pseudoamphisiellina</i> subord. n. <i>Science China Life Sciences</i> , 54(7), 634–641. https://doi.org/10.1007/s11427-011-4192-8
FJ86520 5.1	<i>Acineta compressa</i>	Phyllopharyng ea	Suctorina	Marine/Brackish	Zhao, X., Miao, M., Chen, X., Ma, H. & Al-Rasheid, K. A. S. (2014). A phylogenetic reconsideration of suctorian ciliates (Protista, Ciliophora, Phyllopharyngae) based on small subunit rRNA gene sequences. <i>Zoologica Scripta</i> , 43(2), 206–216. https://doi.org/10.1111/zsc.12040
FJ86520 6.1	<i>Acineta tuberosa</i>	Phyllopharyng ea	Suctorina	Marine/Brackish	Zhao, X., Miao, M., Chen, X., Ma, H. & Al-Rasheid, K. A. S. (2014). A phylogenetic reconsideration of suctorian ciliates (Protista, Ciliophora, Phyllopharyngae) based on small subunit rRNA gene sequences. <i>Zoologica Scripta</i> , 43(2), 206–216. https://doi.org/10.1111/zsc.12040

FJ86520 7.1	<i>Paracineta limbata</i>	Phyllopharyng ea	Suctorina	Marine/Brac kish	Zhao, X., Miao, M., Chen, X., Ma, H. & Al-Rasheid, K. A. S. (2014). A phylogenetic reconsideration of suctorian ciliates (Protista, Ciliophora, Phyllopharyngea) based on small subunit rRNA gene sequences. <i>Zoologica Scripta</i> , 43(2), 206–216. https://doi.org/10.1111/zsc.12040
FJ86819 3.1	<i>Protogastrostyla pulchra</i>	Spirotrichea	Stichotrichia	Marine/Brac kish	Gong, J., Kim, Se.-J., Kim, S.-Y., Min, G.S., Roberts, D. McL., Warren, A., & Choi, J.-K. (2007). Taxonomic Redescriptions of Two Ciliates, <i>Protogastrostyla pulchra</i> n. g., n. comb. and <i>Hemigastrostyla enigmatica</i> (Ciliophora: Spirotrichea, Stichotrichia), with Phylogenetic Analyses Based on 18S and 28S rRNA Gene Sequences. <i>Journal of Eukaryotic Microbiology</i> , 54(6), 468–478. https://doi.org/10.1111/j.1550-7408.2007.00288.x
FJ86820 3.1	<i>Lynchella nordica</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Gao, S., Huang, J., Li, J., & Song, W. (2011). Molecular Phylogeny of the Cyrtophorid Ciliates (Protozoa, Ciliophora, Phyllopharyngea). <i>Plos One</i> , 7 (3), e33198. https://doi.org/10.1371/journal.pone.0033198
FJ86820 4.1	<i>Heterohartmannula fangi</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngea). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198
FJ86820 6.1	<i>Dysteria crassipes</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Gong, J., Song, W., Warren, A., Lin, X., & Roberts, D. McL. (2007). Microscopical observations on four marine <i>Dysteria</i> species (Ciliophora, Cyrtophorida). <i>European Journal of Protistology</i> , 43(2), 147-161. https://doi.org/10.1016/j.ejop.2007.01.002
FJ87006 7.1	<i>Dysteria brasiliensis</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Gong, J., Song, W., Warren, A., Lin, X., & Roberts, D. McL. (2007). Microscopical observations on four marine <i>Dysteria</i> species (Ciliophora, Cyrtophorida). <i>European Journal of Protistology</i> , 43(2), 147-161. https://doi.org/10.1016/j.ejop.2007.01.002
FJ87006 8.1	<i>Dysteria pectinata</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Gong, J., Song, W., Warren, A., Lin, X., & Roberts, D. McL. (2007). Microscopical observations on four marine <i>Dysteria</i> species (Ciliophora, Cyrtophorida). <i>European Journal of Protistology</i> , 43(2), 147-161. https://doi.org/10.1016/j.ejop.2007.01.002
FJ87006 9.1	<i>Microxysma acutum</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Zhang, W., & Xu, H. (2015). Seasonal shift in community pattern of periphytic ciliates and its environmental drivers in coastal waters of the Yellow Sea, northern China. <i>Journal of the Marine Biological Association of the United Kingdom</i> , 95(2), 277-288. doi:10.1017/S002531541400143X
FJ87007 0.1	<i>Pithites vorax</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngea). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198

FJ87007 1.1	<i>Trichopodiella faurei</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Chen, X., Pan, H., Huang, J., Warren, A., Al-Farraj, S.A., & Gao, S. (2015). New considerations on the phylogeny of cyrtophorian ciliates (Protozoa, Ciliophora): expanded sampling to understand their evolutionary relationships. <i>Zoologica Scripta</i> , 45, 334–348. https://doi.org/10.1111/zsc.12150
FJ87007 2.1	<i>Amphisiella milnei</i>	Spirotrichea	Stichotrichia	Marine/Brac kish	Li, L., Zhao, X., Ji, D., Hu, X., Al-Rasheid, K. A., Al-Farraj, S. A., & Song, W. (2016). Description of two marine amphisiellid ciliates, <i>Amphisiella milnei</i> (Kahl, 1932) Horváth, 1950 and <i>A. sinica</i> sp. nov. (Ciliophora: Hypotrichia), with notes on their ontogenesis and SSU rDNA-based phylogeny. <i>European Journal of Protistology</i> , 54, 59–73. https://doi.org/10.1016/j.ejop.2016.04.004
FJ87007 3.1	<i>Amphisiella sinica</i>	Spirotrichea	Stichotrichia	Marine/Brac kish	Li, L., Zhao, X., Ji, D., Hu, X., Al-Rasheid, K. A., Al-Farraj, S. A., & Song, W. (2016). Description of two marine amphisiellid ciliates, <i>Amphisiella milnei</i> (Kahl, 1932) Horváth, 1950 and <i>A. sinica</i> sp. nov. (Ciliophora: Hypotrichia), with notes on their ontogenesis and SSU rDNA-based phylogeny. <i>European Journal of Protistology</i> , 54, 59–73. https://doi.org/10.1016/j.ejop.2016.04.004
FJ87007 5.1	<i>Anteholosticha marimonilata</i>	Spirotrichea	Hypotrichia	Marine/Brac kish	Xu, Y., Huang, J., Hu, X., Al-Rasheid, K., Song, W., & Warren, A. (2011). Taxonomy, ontogeny and molecular phylogeny of <i>Anteholosticha marimonilata</i> spec. nov. (Ciliophora, Hypotrichida) from the Yellow Sea, China. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 61(Pt 8), 2000–2014. https://doi.org/10.1099/ijs.0.024638-0
FJ87007 6.1	<i>Paradiophrys zhangii</i>	Spirotrichea	Hypotrichia	Marine/Brac kish	Jiang, J., Warren, A., & Song, W. (2011). Morphology and molecular phylogeny of two new marine euplotids, <i>Pseudodiophrys nigricans</i> n. g., n. sp., and <i>Paradiophrys zhangii</i> n. sp. (Ciliophora: Euplotida). <i>Journal of Eukaryotic Microbiology</i> , 58(5), 437–445. https://doi.org/10.1111/j.1550-7408.2011.00567.x
FJ87008 2.1	<i>Euplotes balteatus</i>	Spirotrichea	Euplotia	Marine/Brac kish	Chen, X., Zhao, Y., Al-Farraj, S. A., Al-Quraishy, S. A., El-Serehy, H. A., Shao, C., & Al-Rasheid, K. A. S. (2013). Taxonomic Descriptions of Two Marine Ciliates, <i>Euplotes dammamensis</i> n. sp. and <i>Euplotes balteatus</i> (Dujardin, 1841) Kahl, 1932 (Ciliophora, Spirotrichea, Euplotida), Collected from the Arabian Gulf, Saudi Arabia. <i>Acta Protozoologica</i> , 52, 73–89. https://doi.org/10.4467/16890027AP.13.008.1087
FJ87008 5.1	<i>Schmidingerothrix salina</i>	Spirotrichea	Stichotrichia	Marine/Brac kish	Shao, C., Li, L., Zhang, Q., Song, W., & Berger, H. (2014). Molecular Phylogeny and Ontogeny of a New Ciliate Genus, <i>Paracladotricha salina</i> n. g., n. sp. (Ciliophora, Hypotrichia). <i>Journal of Eukaryotic Microbiology</i> , 61, 371–380. https://doi.org/10.1111/jeu.12117
FJ87008 9.1	<i>Apogastrostyla rigescens</i>	Spirotrichea	Stichotrichia	Marine/Brac kish	Li, L., Huang, J., Song, W., Shin, M. K., Al-Rasheid, K. A. S., Berger, H. (2010). <i>Apogastrostyla rigescens</i> (Kahl, 1932) gen. nov., comb. nov. (Ciliophora, Hypotrichia): Morphology, Notes on Cell Division, SSU rRNA Gene Sequence Data, and Neotypification. <i>Acta Protozoologica</i> , 49, 195–212.

FJ87009 3.1	<i>Spirotrachelostyla tani</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Huang, J., Yi, Z., Al-Farraj, S. A., & Song, W. (2010). Phylogenetic positions and taxonomic assignments of the systematically controversial genera, <i>Spirotrachelostyla</i> , <i>Uroleptopsis</i> and <i>Tunicothrix</i> (Protozoa, Ciliophora, Stichotrichia) based on small subunit rRNA gene sequences. <i>Systematics and Biodiversity</i> , 8(3), 409–416. https://doi.org/10.1080/14772000.2010.508502
FJ87009 4.1	<i>Uroleptopsis citrina</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Huang, J., Yi, Z., Al-Farraj, S. A., & Song, W. (2010). Phylogenetic positions and taxonomic assignments of the systematically controversial genera, <i>Spirotrachelostyla</i> , <i>Uroleptopsis</i> and <i>Tunicothrix</i> (Protozoa, Ciliophora, Stichotrichia) based on small subunit rRNA gene sequences. <i>Systematics and Biodiversity</i> , 8(3), 409–416. https://doi.org/10.1080/14772000.2010.508502
FJ87009 6.1	<i>Hemigastrostyla enigmatica</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The All-Data-Based Evolutionary Hypothesis of Ciliated Protists with a Revised Classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 24874. https://doi.org/10.1038/srep24874
FJ87009 7.1	<i>Neourostyloopsis orientalis</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Chen, X., Shao, C., Liu, X., Huang, J., & Al-Rasheid, K. A. S. (2013). Morphology and phylogenies of two hypotrichous brackish-water ciliates from China, <i>Neourostyloopsis orientalis</i> n. sp. and <i>Protogastrostyla sterkii</i> (Wallengren, 1900) n. comb., with establishment of a new genus <i>Neourostyloopsis</i> n. gen. (Protista, Ciliophora, Hypotrichia). <i>International Journal of Systematic and Evolutionary Microbiology</i> , 63, 1197–1209. https://doi.org/10.1099/ijs.0.049403-0
FJ87009 9.1	<i>Protogastrostyla sterkii</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Chen, X., Shao, C., Liu, X., Huang, J., & Al-Rasheid, K. A. S. (2013). Morphology and phylogenies of two hypotrichous brackish-water ciliates from China, <i>Neourostyloopsis orientalis</i> n. sp. and <i>Protogastrostyla sterkii</i> (Wallengren, 1900) n. comb., with establishment of a new genus <i>Neourostyloopsis</i> n. gen. (Protista, Ciliophora, Hypotrichia). <i>International Journal of Systematic and Evolutionary Microbiology</i> , 63, 1197–1209. https://doi.org/10.1099/ijs.0.049403-0
FJ87513 8.1	<i>Euplotes orientalis</i>	Spirotrichea	Euplotia	Marine/Brackish	Jiang, J., Zhang, Q., Warren, A., Al-Rasheid, K. A., & Song, W. (2010). Morphology and SSU rRNA gene-based phylogeny of two marine <i>Euplotes</i> species, <i>E. orientalis</i> spec. nov. and <i>E. raikovi</i> (Ciliophora, Euplotida). <i>European Journal of Protistology</i> , 46(2), 121-132. https://doi.org/10.1016/j.ejop.2009.11.003
FJ87514 0.1	<i>Paraspathidium apofuscum</i>	Plagiopylea	-	Marine/Brackish	Zhang, Q., Simpson, A., & Song, W. (2012). Insights into the phylogeny of systematically controversial haptorian ciliates (Ciliophora, Litostomatea) based on multigene analyses. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 279(1738), 2625–2635. https://doi.org/10.1098/rspb.2011.2688

FJ87514 1.1	<i>Frontonia mengi</i>	Oligohymenophorea	Peniculia	Marine/Brackish	Fan, X., Chen, X., Song, W., Al-Rasheid, K. A. S., & Warren, A. (2011). Two novel marine <i>Frontonia</i> species, <i>Frontonia mengi</i> spec. nov. and <i>Frontonia magna</i> spec. nov. (Protozoa; Ciliophora), with notes on their phylogeny based on small-subunit rRNA gene sequence data. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 61, 1476–1486. https://doi.org/10.1099/ijs.0.024794-0
FJ87695 3.1	<i>Frontonia magna</i>	Oligohymenophorea	Peniculia	Marine/Brackish	Fan, X., Chen, X., Song, W., Al-Rasheid, K. A. S., & Warren, A. (2011). Two novel marine <i>Frontonia</i> species, <i>Frontonia mengi</i> spec. nov. and <i>Frontonia magna</i> spec. nov. (Protozoa; Ciliophora), with notes on their phylogeny based on small-subunit rRNA gene sequence data. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 61, 1476–1486. https://doi.org/10.1099/ijs.0.024794-0
FJ87695 8.1	<i>Novistrombidium apsheronicum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Song, W., Li, J., Liu, W., Jiang, J., Rasheid, K., & Hu, X. (2013). Taxonomy, morphology and molecular systematics of three oligotrich ciliates, including a description of <i>Apostrombidium parakielum</i> spec. nov. (Ciliophora, Oligotrichia). <i>International Journal of Systematic & Evolutionary microbiology</i> , 63(Pt 3), 1179–1191. https://doi.org/10.1099/ijs.0.048314-0
FJ87695 9.1	<i>Pelagostrobilidium minutum</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Liu, W., Yi, Z., Lin, X., Warren, A., & Song, W. (2012). Phylogeny of three choreotrich genera (Protozoa, Ciliophora, Spirotrichea), with morphological, morphogenetic and molecular investigations on three strobilidiid species. <i>Zoological Scripta</i> , 41 (4), 417–434. doi:10.1111/j.1463-6409.2012.00542.x
FJ87696 3.1	<i>Pelagostrobilidium paraepacrum</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Liu, W., Yi, Z., Lin, X., Warren, A., & Song, W. (2012). Phylogeny of three choreotrich genera (Protozoa, Ciliophora, Spirotrichea), with morphological, morphogenetic and molecular investigations on three strobilidiid species. <i>Zoological Scripta</i> , 41 (4), 417–434. doi:10.1111/j.1463-6409.2012.00542.x
FJ87696 4.1	<i>Rimostrombidium veniliae</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Liu, W., Yi, Z., Lin, X., Warren, A. and Song, W. (2012). Phylogeny of three choreotrich genera (Protozoa, Ciliophora, Spirotrichea), with morphological, morphogenetic and molecular investigations on three strobilidiid species. <i>Zoologica Scripta</i> , 41, 417–434. https://doi.org/10.1111/j.1463-6409.2012.00542.x
FJ87696 5.1	<i>Lynnella semiglobulosa</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Liu, W., Yi, Z., Lin, X., & Al-Rasheid, K. A. (2011). Morphologic and molecular data suggest that <i>Lynnella semiglobulosa</i> n. g., n. sp. represents a new family within the subclass Choreotrichia (Ciliophora, Spirotrichea). <i>The Journal of Eukaryotic Microbiology</i> , 58(1), 43–49. https://doi.org/10.1111/j.1550-7408.2010.00519.x

FJ87696 6.1	<i>Williophrya maedai</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Liu, W., Yi, Zh., Warren, A., Al-Rasheid, K. A. S., Al-Farraj, S. A., Lin, X., & Song, W. (2011), Taxonomy, morphology and molecular systematics of a new oligotrich ciliate, <i>Williophrya maedai</i> gen. nov., sp. nov., with redescriptions of <i>Strombidium simplicidens</i> (Protozoa, Ciliophora, Oligotrichia). <i>Systematics and Biodiversity</i> , 9(3), 247-258. https://doi.org/10.1080/14772000.2011.605812
FJ87696 9.1	<i>Paratetrahymena parawassi</i>	Oligohymenophorea	Scuticociliata	Marine/Brackish	Zhang, Q., Fan, X., Clamp, J. C., Al-Rasheid, K. A., & Song, W. (2010). Description of <i>Paratetrahymena parawassi</i> n. sp. using morphological and molecular evidence and a phylogenetic analysis of <i>Paratetrahymena</i> and other taxonomically ambiguous genera in the order Loxocephalida (Ciliophora, Oligohymenophorea). <i>The Journal of Eukaryotic Microbiology</i> , 57(6), 483–493. https://doi.org/10.1111/j.1550-7408.2010.00501.x
FJ87697 1.1	<i>Cyclotrichium cyclokaryon</i>	Plagiopylea	-	Marine/Brackish	Zhang, Q., Simpson, A., & Song, W. (2012). Insights into the phylogeny of systematically controversial haptorian ciliates (Ciliophora, Litostomatea) based on multigene analyses. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 279(1738), 2625–2635. https://doi.org/10.1098/rspb.2011.2688
FJ87697 5.1	<i>Lacrymaria marina</i>	Litostomatea	Haptoria	Marine/Brackish	Zhang, Q., Simpson, A., & Song, W. (2012). Insights into the phylogeny of systematically controversial haptorian ciliates (Ciliophora, Litostomatea) based on multigene analyses. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 279(1738), 2625–2635. https://doi.org/10.1098/rspb.2011.2688
FJ87697 6.1	<i>Loxophyllum shini</i>	Litostomatea	Haptoria	Marine/Brackish	Zhang, Q., Simpson, A., & Song, W. (2012). Insights into the phylogeny of systematically controversial haptorian ciliates (Ciliophora, Litostomatea) based on multigene analyses. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 279(1738), 2625–2635. https://doi.org/10.1098/rspb.2011.2688
FJ87697 8.1	<i>Caryotricha rariseta</i>	Spirotrichea	Protohypotrichia	Marine/Brackish	Jiang, J., Xing, Y., Miao, M., Shao, C., Warren., & Song, W. (2013). Two New Marine Ciliates, <i>Caryotricha rariseta</i> n. sp. and <i>Discocephalus pararotatorius</i> n. sp. (Ciliophora, Spirotrichea), with Phylogenetic Analyses Inferred from the Small Subunit rRNA Gene Sequences. <i>Journal of Eukaryotic Microbiology</i> , 60(4), 388–398. https://doi.org/10.1111/jeu.12046
FJ87698 1.1	<i>Euplotes charon</i>	Spirotrichea	Euplotia	Marine/Brackish	Alekperov, I. K., & Tahirova, E. N. (2019). Free-living ciliates in different coastal zone biotopes at the Azerbaijan sector of the Caspian Sea. <i>Protistology</i> , 13(3), 133-151. doi:10.21685/1680-0826-2019-13-3-3
FJ87698 2.1	<i>Uronychia sinica</i>	Spirotrichea	Euplotia	Marine/Brackish	Huang, J., Dunthorn, M., & Song, W. (2012). Expanding character sampling for the molecular phylogeny of euplotid ciliates (Protozoa, Ciliophora) using three markers, with a focus on the family Uronychiidae. <i>Molecular Phylogenetics and Evolution</i> 63 (3), 598-605. https://doi.org/10.1016/j.ympev.2012.02.007

FJ88186 2.1	<i>Strombidinopsis batos</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Lynn, D. H., Montagnes, D. J. S., Dale, T., Giron, G. L., & Strom, S. L. (1991). A reassessment of the genus <i>Strombidinopsis</i> (Ciliophora, Choreotrichida) with descriptions of four new planktonic species and remarks on its taxonomy and phylogeny. <i>Journal of the Marine Biological Association of the United Kingdom</i> , 71(3), 597-612. https://doi.org/10.1017/S0025315400053170
FJ99802 0.1	<i>Aspidisca hongkongensis</i>	Spirotrichea	Euplotia	Marine/Brac kish	Shen, Z., Huang, J., Lin, X., Yi, Z., Li, J., & Song, W. (2010). Morphological and molecular characterization of <i>Aspidisca hongkongensis</i> spec. nov. (Ciliophora, Euplotida) from the South China Sea. <i>European Journal of Protistology</i> , 46(3), 204–211. https://doi.org/10.1016/j.ejop.2010.01.004
FJ99802 1.1	<i>Condylostoma arenarium</i>	Heterotrichea	-	Marine/Brac kish	Chen, X., Li, J., & Xu, K. (2020). Multigene-based phylogeny analyses of the controversial family Condylomatidae (Ciliophora, Heterotrichea). <i>Zoologica Scripta</i> , 49, 250–264. https://doi.org/10.1111/zsc.12383
FJ99802 4.1	<i>Euplotes neapolitanus</i>	Spirotrichea	Euplotia	Marine/Brac kish	Liu, W., Jiang, J., Tan, Y., & Lin, X. (2020). Novel Contributions to the Taxonomy of the Ciliates Genus <i>Euplotes</i> (Ciliophora, Euplotida): Redescription of Two Poorly Known Species, With a Brief Note on the Distributions of This Genus in Coastal Waters of Southern China. <i>Frontiers in Marine Science</i> , 7, 615413. https://doi.org/10.3389/fmars.2020.615413
FJ99802 5.1	<i>Euplotes parawoodruffi</i>	Spirotrichea	Euplotia	Marine/Brac kish	Dai, R., Xu, K., & He, Y. (2013). Morphological, Physiological, and Molecular Evidences Suggest that <i>Euplotes parawoodruffi</i> is a Junior Synonym of <i>Euplotes woodruffi</i> (Ciliophora, Euplotida). <i>Journal of Eukaryotic Microbiology</i> , 60, 70-78. https://doi.org/10.1111/jeu.12007
FJ99802 8.1	<i>Aegyriana oliva</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngea). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198
FJ99803 0.1	<i>Chlamydonon obliquus</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngea). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198
FJ99803 1.1	<i>Chlamydonon mnemosyne</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngea). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198
FJ99803 2.1	<i>Chlamydonella pseudochilodon</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngea). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198

FJ99803 3.1	<i>Chlamydonellopsis calkinsi</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngea). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198
FJ99803 5.1	<i>Paracyrtophoron tropicum</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngea). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198
FJ99803 7.1	<i>Trithigmostoma cucullulus</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngea). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198
FM20129 8.1	<i>Pseudomicrothorax dubius</i>	Nassophorea	-	Freshwater	Ferrantini, F., Fokin, S. I., Modeo, L., Andreoli, I., Dini, F., Gortz, H.-D., Verni, F., & Petroni, G. (2009). "Candidatus Cryptoprodotis polytropus," A Novel Rickettsia-Like Organism in the Ciliated Protist Pseudomicrothorax dubius (Ciliophora, Nassophorea). <i>Journal of Eukaryotic Microbiology</i> , 56(2), 119-129. https://doi.org/10.1111/j.1550-7408.2008.00377.x
FM20178 1.1	<i>Spirodinium equi</i>	Litostomatea	Trichostomat ia	Symbiosis	Snelling, T., Pinloche, E., Worgan, H. J., Newbold, C. J., & McEwan, N. R. (2012). Molecular Phylogeny of <i>Spirodinium equi</i> , <i>Triadinium caudatum</i> and <i>Blepharocorys</i> sp. from the Equine Hindgut. <i>Acta Protozoologica</i> , 50, 319-326. https://doi.org/10.4467/16890027AP.11.029.0066
FM20178 2.1	<i>Triadinium caudatum</i>	Litostomatea	Trichostomat ia	Symbiosis	Snelling, T., Pinloche, E., Worgan, H. J., Newbold, C. J., & McEwan, N. R. (2012). Molecular Phylogeny of <i>Spirodinium equi</i> , <i>Triadinium caudatum</i> and <i>Blepharocorys</i> sp. from the Equine Hindgut. <i>Acta Protozoologica</i> , 50, 319-326. https://doi.org/10.4467/16890027AP.11.029.0066
FM20929 4.1	<i>Histiculus histrio</i>	Spirotrichea	Hypotrichia	Freshwater	Jung, J. H., Park, K. M., & Min, G. S. (2015). Morphology and Molecular Phylogeny of <i>Pseudocyrtohymena koreana</i> n. g., n. sp. and Antarctic <i>Neokeronopsis asiatica</i> Foissner et al., 2010 (Ciliophora, Sporadotrichida), with a Brief Discussion of the <i>Cyrtohymena</i> Undulating Membranes Pattern. <i>Journal of Eukaryotic Microbiology</i> , 62(3), 280-297. https://doi.org/10.1111/jeu.12179
FN65981 7.1	<i>Stentor elegans</i>	Heterotrichea	-	Freshwater	Thamm, M., Schmidt, S. L., & Bernhard, D. (2009). Insights into the phylogeny of the genus <i>Stentor</i> (Heterotrichea, Ciliophora) with special emphasis on the evolution of the macronucleus based on SSU rDNA data. <i>Acta Protozoologica</i> , 49(3), 149-157.
FN65981 8.1	<i>Stentor katashimai</i>	Heterotrichea	-	Freshwater	Thamm, M., Schmidt, S. L., & Bernhard, D. (2009). Insights into the phylogeny of the genus <i>Stentor</i> (Heterotrichea, Ciliophora) with special emphasis on the evolution of the macronucleus based on SSU rDNA data. <i>Acta Protozoologica</i> , 49(3), 149-157.

FN65982 0.1	<i>Stentor muelleri</i>	Heterotrichea	-	Freshwater	Thamm, M., Schmidt, S. L., & Bernhard, D. (2009). Insights into the phylogeny of the genus <i>Stentor</i> (Heterotrichea, Ciliophora) with special emphasis on the evolution of the macronucleus based on SSU rDNA data. <i>Acta Protozoologica</i> , 49(3), 149-157.
FN65982 1.1	<i>Stentor multiformis</i>	Heterotrichea	-	Freshwater	Thamm, M., Schmidt, S. L., & Bernhard, D. (2009). Insights into the phylogeny of the genus <i>Stentor</i> (Heterotrichea, Ciliophora) with special emphasis on the evolution of the macronucleus based on SSU rDNA data. <i>Acta Protozoologica</i> , 49(3), 149-157.
FN99901 5.1	<i>Durchoniella legeriduboscqu</i>	Oligohymenophorea	Astomatia	Symbiosis	Sauvadet, A. L., Lynn, D. H., Roussel, E. G., Le Panse, S., Bigeard, E., Schrével, J., & Guillou, L. (2017). Redescription and phylogenetic analyses of <i>Durchoniella</i> spp. (Ciliophora, Astomatida) associated with the polychaete <i>Cirriiformia tentaculata</i> (Montagu, 1808). <i>European Journal of Protistology</i> , 61(Pt A), 265–277. https://doi.org/10.1016/j.ejop.2017.06.007
FN99902 2.1	<i>Durchoniella brasil</i>	Oligohymenophorea	Astomatia	Symbiosis	Sauvadet, A. L., Lynn, D. H., Roussel, E. G., Le Panse, S., Bigeard, E., Schrével, J., & Guillou, L. (2017). Redescription and phylogenetic analyses of <i>Durchoniella</i> spp. (Ciliophora, Astomatida) associated with the polychaete <i>Cirriiformia tentaculata</i> (Montagu, 1808). <i>European Journal of Protistology</i> , 61(Pt A), 265–277. https://doi.org/10.1016/j.ejop.2017.06.007
GQ16715 3.1	<i>Trachelocerca ditis</i>	Karyorelictea	-	Marine/Brackish	Mazei, Y., Gao, S., Warren, A., Li, L., Li, J., Song, W., & Esaulov, A. A. (2009). Reinvestigation of the Marine Ciliate <i>Trachelocerca ditis</i> (Wright, 1982) Foissner and Dragesco, 1996 (Ciliophora, Karyorelictea) from the Yellow Sea and an Assessment of Its Phylogenetic Position Inferred from the Small Subunit rRNA Gene Sequence
GQ22194 0.1	<i>Apocarchesium arndti</i>	Oligohymenophorea	Peritrichia	Freshwater	Norf, H., & Foissner, W. (2010). A new flagship peritrich (Ciliophora, Peritrichida) from the River Rhine, Germany: <i>Apocarchesium arndti</i> n. sp. <i>The Journal of Eukaryotic Microbiology</i> , 57(3), 250–264. https://doi.org/10.1111/j.1550-7408.2010.00473.x
GQ35170 1.1	<i>Litonotus pictus</i>	Litostomatea	Haptoria	Marine/Brackish	Kim, S.-J., & Min, G.-S. (2009). Taxonomic Study of Poorly-known Marine Pleurostomatid Ciliates of <i>Litonotus paracygnus</i> and <i>L. pictus</i> (Ciliophora, Pleurostomatida) from Korea. <i>The Korean Journal of Systematic Zoology</i> , 25(2), 167-178. https://doi.org/10.5635/KJSZ.2009.25.2.167
GQ46546 6.1	<i>Uronema marinum</i>	Oligohymenophorea	Scuticociliata	Symbiosis	Song, J.Y., Kitamura, S.I., Oh, M.J., Kang, H.S., Lee, J.H., Tanaka, S.J., Jung, S.J., 2009. Pathogenicity of <i>Miamiensis avidus</i> (syn. <i>Philasterides dicentrarchi</i>), <i>Pseudocohnilembus persalinus</i> , <i>Pseudocohnilembus hargisi</i> and <i>Uronema marinum</i> (Ciliophora, Scuticociliatida). <i>Diseases of Aquatic Organisms</i> , 83, 133-143. https://doi.org/10.3354/dao02017
GQ87242 7.2	<i>Vorticellides astyliformis</i>	Oligohymenophorea	Peritrichia	Freshwater	Foissner, W., Blake, N., Wolf, K., Breiner, H. W., & Stoeck, T. (2010). Morphological and Molecular Characterization of Some Peritrichs (Ciliophora: Peritrichida) from Tank Bromeliads, Including Two New Genera: <i>Orborhabdostyla</i> and <i>Vorticellides</i> . <i>Acta Protozoologica</i> , 48(2), 291-319.

GQ87242 8.1	<i>Orborhabdostyla bromelicol</i>	Oligohymenop horea	Peritrichia	Freshwater	Foissner, W., Blake, N., Wolf, K., Breiner, H. W., & Stoeck, T. (2010). Morphological and Molecular Characterization of Some Peritrichs (Ciliophora: Peritrichida) from Tank Bromeliads, Including Two New Genera: <i>Orborhabdostyla</i> and <i>Vorticellides</i> . <i>Acta Protozoologica</i> , 48(2), 291-319.
GQ87242 9.1	<i>Vorticella gracilis</i>	Oligohymenop horea	Peritrichia	Freshwater	Foissner, W., Blake, N., Wolf, K., Breiner, H. W., & Stoeck, T. (2010). Morphological and Molecular Characterization of Some Peritrichs (Ciliophora: Peritrichida) from Tank Bromeliads, Including Two New Genera: <i>Orborhabdostyla</i> and <i>Vorticellides</i> . <i>Acta Protozoologica</i> , 48(2), 291-319.
GU18705 3.1	<i>Carchesium polypinum</i>	Oligohymenop horea	Peritrichia	Freshwater	Sun, P., Clamp, J. C., Xu, D., Kusuoka, Y., & Hori, M. (2011). Molecular phylogeny of the family Vorticellidae (Ciliophora, Peritrichia) using combined datasets with a special emphasis on the three morphologically similar genera <i>Carchesium</i> , <i>Epicarchesium</i> and <i>Apocarchesium</i> . <i>International Journal of Systematic & Evolutionary Microbiology</i> , 61(Pt 4), 1001–1010. https://doi.org/10.1099/ijls.0.020255-0
GU18705 6.1	<i>Apocarchesium rosettum</i>	Oligohymenop horea	Peritrichia	Freshwater	Sun, P., Clamp, J. C., Xu, D., Kusuoka, Y., & Hori, M. (2011). Molecular phylogeny of the family Vorticellidae (Ciliophora, Peritrichia) using combined datasets with a special emphasis on the three morphologically similar genera <i>Carchesium</i> , <i>Epicarchesium</i> and <i>Apocarchesium</i> . <i>International Journal of Systematic Evolutionary Microbiology</i> , 61(Pt 4), 1001-1010. https://doi.org/10.1099/ijls.0.020255-0
GU43721 0.1	<i>Tunicothrix wilberti</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Huang, J., Yi, Z., Al-Farraj, S. A., & Song, W. (2010). Phylogenetic positions and taxonomic assignments of the systematically controversial genera, Spirotrachelostyla, Uroleptopsis and Tunicothrix (Protozoa, Ciliophora, Stichotrichia) based on small subunit rRNA gene sequences. <i>Systematics and Biodiversity</i> , 8(3), 409–416. https://doi.org/10.1080/14772000.2010.508502
GU47763 4.1	<i>Apodiophrys ovalis</i>	Spirotrichea	-	Marine/Brackish	Jiang, J., & Song, W. (2010). Two new Diophrys-like genera and their type species, <i>Apodiophrys ovalis</i> n. g., n. sp. and <i>Heterodiophrys zhui</i> n. g., n. sp. (Ciliophora: Euplotida), with notes on their molecular phylogeny. <i>Journal of Eukaryotic Microbiology</i> , 57(4), 354-361.
GU47763 5.1	<i>Heterodiophrys zhui</i>	Spirotrichea	-	Marine/Brackish	Jiang, J., & Song, W. (2010). Two new Diophrys-like genera and their type species, <i>Apodiophrys ovalis</i> n. g., n. sp. and <i>Heterodiophrys zhui</i> n. g., n. sp. (Ciliophora: Euplotida), with notes on their molecular phylogeny. <i>Journal of Eukaryotic Microbiology</i> , 57(4), 354-361.
GU47939 3.1	<i>Euplotes nobilii</i>	Spirotrichea	Euplotia	Marine/Brackish	Di Giuseppe, G., Erra, F., Dini, F., Alimenti, C., Vallesi, A., Pedrini, B., Wuthrich, K., & Luporini, P. (2011). Antarctic and Arctic populations of the ciliate <i>Euplotes nobilii</i> show common pheromone mediated cell-cell signaling and cross-mating. <i>Proceedings of the National Academy of Sciences of the United States of America</i> 108: 3181–3186.

GU57477 0.1	<i>Favella ehrenbergii</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Kim, S. Y., Yang, E. J., Gong, J., & Choi, J. K. (2010). Redescription of <i>Favella ehrenbergii</i> (Claparede and Lachmann, 1858) Jorgensen, 1924 (Ciliophora: Choreotrichia), with phylogenetic analyses based on small subunit rRNA gene sequences. <i>Journal of Eukaryotic Microbiology</i> , 57(6), 460-467. https://doi.org/10.1111/j.1550-7408.2010.00500.x
GU57480 9.1	<i>Epiphyllum shenzhenense</i>	Litostomatea	Haptoria	Marine/Brackish	Pan, H., Gao, F., Li, J., Lin, X., Al-Farraj, S. A., & Al-Rasheid, K. A. (2010). Morphology and phylogeny of two new pleurostomatid ciliates, <i>Epiphyllum shenzhenense</i> n. sp. and <i>Loxophyllum spirellum</i> n. sp. (Protozoa, Ciliophora) from a mangrove wetland, South China. <i>The Journal of Eukaryotic Microbiology</i> , 57(5), 421-428. https://doi.org/10.1111/j.1550-7408.2010.00492.x
GU57481 0.1	<i>Loxophyllum spirellum</i>	Litostomatea	-	Marine/Brackish	Pan, H., Gao, F., Li, J., Lin, X., Al-Farraj, S. A., & Al-Rasheid, K. A. (2010). Morphology and phylogeny of two new pleurostomatid ciliates, <i>Epiphyllum shenzhenense</i> n. sp. and <i>Loxophyllum spirellum</i> n. sp. (Protozoa, Ciliophora) from a mangrove wetland, South China. <i>The Journal of Eukaryotic Microbiology</i> , 57(5), 421-428. https://doi.org/10.1111/j.1550-7408.2010.00492.x
GU57481 1.1	<i>Tunicothrix brachysticha</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Dai, R., & Xu, K. (2010). Taxonomy and phylogeny of <i>Tunicothrix</i> (Ciliophora, Stichotrichia), with the description of two novel species, <i>Tunicothrix brachysticha</i> n. sp. and <i>Tunicothrix multinucleata</i> n. sp., and the establishment of Parabirojimidiae n. fam. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 61, 1487-1496. https://doi.org/10.1099/ijs.0.024463-0
GU94256 4.1	<i>Diaxonella pseudorubra</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Li, L., Khan, S. N., Ji, D., Shin, M. K., & Berger, H. (2011). Morphology and Small Subunit (SSU) rRNA Gene Sequence of the New Brackish Water Ciliate <i>Neobakuella flava</i> n. g., n. sp. (Ciliophora, Spirotricha, Bakuellidae) and SSU rRNA Gene Sequences of Six Additional Hypotrichs from Korea. <i>Journal of Eukaryotic Microbiology</i> , 58 (4), 339-351. https://doi.org/10.1111/j.1550-7408.2011.00561.x
GU94256 5.1	<i>Sterkiella cavicola</i>	Spirotrichea	Hypotrichia	Terrestrial	Li, L., Khan, S. N., Ji, D., Shin, M. K., & Berger, H. (2011). Morphology and Small Subunit (SSU) rRNA Gene Sequence of the New Brackish Water Ciliate <i>Neobakuella flava</i> n. g., n. sp. (Ciliophora, Spirotricha, Bakuellidae) and SSU rRNA Gene Sequences of Six Additional Hypotrichs from Korea. <i>Journal of Eukaryotic Microbiology</i> , 58 (4), 339-351. https://doi.org/10.1111/j.1550-7408.2011.00561.x
GU94256 7.1	<i>Anteholosticha monilata</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Li, L., Khan, S. N., Ji, D., Shin, M. K., & Berger, H. (2011). Morphology and small subunit (SSU) rRNA gene sequence of the new brackish water ciliate <i>Neobakuella flava</i> n. g., n. sp. (Ciliophora, Spirotricha, Bakuellidae) and SSU rRNA gene sequences of six additional hypotrichs from Korea. <i>The Journal of Eukaryotic Microbiology</i> , 58(4), 339-351. https://doi.org/10.1111/j.1550-7408.2011.00561.x

GU95366 7.1	<i>Euplotes cristatus</i>	Spirotrichea	Euplotia	Marine/Brackish	Park, Mi.-H., Kim, S.-J., & Min, G.-S. (2010). First Record of Two Euplotes Ciliates (Ciliophora: Spirotrichea: Euplotida) from Korea. <i>Korean Journal of Systematic Zoology</i> , 26(1), 21-27. https://doi.org/10.5635/KJSZ.2010.26.1.021
GU96769 8.1	<i>Neobakuella flava</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Li, L., Khan, S. N., Ji, D., Shin, M. K., & Berger, H. (2011). Morphology and Small Subunit (SSU) rRNA Gene Sequence of the New Brackish Water Ciliate <i>Neobakuella flava</i> n. g., n. sp. (Ciliophora, Spirotricha, Bakuellidae) and SSU rRNA Gene Sequences of Six Additional Hypotrichs from Korea. <i>Journal of Eukaryotic Microbiology</i> , 58 (4), 339-351. https://doi.org/10.1111/j.1550-7408.2011.00561.x
GU99763 3.1	<i>Microdiaphanosoma arcuatum</i>	Colpodea	-	Freshwater	Quintela-Alonso, P., Nitsche, F., & Arndt, H. (2011). Molecular characterization and revised systematics of <i>Microdiaphanosoma arcuatum</i> (Ciliophora, Colpodea). <i>The Journal of Eukaryotic Microbiology</i> , 58(2), 114–119. https://doi.org/10.1111/j.1550-7408.2010.00527.x
HE65090 7.2	<i>Paramecium multimicronucleatum</i>	Oligohymenophorea	Peniculia	Freshwater	Shakoori, F. R., Tasneem, F., Al-Ghanim, K., Mahboob, S., Al-Misned, F., Jahan, N., & Shakoori, A. R. (2014). Variability in secondary structure of 18S ribosomal RNA as topological marker for identification of <i>Paramecium</i> species. <i>Journal of Cellular Biochemistry</i> , 115(12), 2077–2088. https://doi.org/10.1002/jcb.24885
HE66276 0.2	<i>Paramecium jenningsi</i>	Oligohymenophorea	Peniculia	Freshwater	Przyboś, E., Rautian, M., Beliavskaia, A., & Tarcz, S. (2019). Evaluation of the molecular variability and characteristics of <i>Paramecium polycaryum</i> and <i>Paramecium nephridiatum</i> , within subgenus <i>Cypriostomum</i> (Ciliophora, Protista). <i>Molecular Phylogenetics & Evolution</i> , 132, 296–306. https://doi.org/10.1016/j.ympev.2018.12.003
HE77511 0.1	<i>Euplotidium itoi</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Modeo, L., Petroni, G., Lobban, C. S., Verni, F., & Vannini, C. (2013). Morphological, ultrastructural, and molecular characterization of <i>Euplotidium rosati</i> n. sp. (Ciliophora, Euplotida) from Guam. <i>The Journal of Eukaryotic Microbiology</i> , 60(1), 25–36. https://doi.org/10.1111/jeu.12003
HE77511 2.1	<i>Euplotidium rosati</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Modeo, L., Petroni, G., Lobban, C. S., Verni, F., & Vannini, C. (2013). Morphological, ultrastructural, and molecular characterization of <i>Euplotidium rosati</i> n. sp. (Ciliophora, Euplotida) from Guam. <i>The Journal of Eukaryotic Microbiology</i> , 60(1), 25–36. https://doi.org/10.1111/jeu.12003
HE82072 6.1	<i>Tetrahymena farahensis</i>	Oligohymenophorea	Hymenostomatia	Freshwater	Zahid, M. T., Shakoori, F. R., Zulifqar, S., Jahan, N., & Shakoori, A. R. (2014). A New Ciliate Species, <i>Tetrahymena farahensis</i> , Isolated from the Industrial Wastewater and Its Phylogenetic Relationship with Other Members of the Genus <i>Tetrahymena</i> . <i>Pakistan Journal of Zoology</i> , 46(5), 1433-1433.

HE97825 1.1	<i>Paramecium nephridiatum</i>	Oligohymenophorea	Peniculia	Marine/Brackish	Boscaro, V., Petroni, G., Ristori, A., Verni, F., & Vannini, C. (2013). "Candidatus Defluviella procrastinata" and "Candidatus Cyrtobacter zanobii", Two Novel Ciliate Endosymbionts Belonging to the "Midichloria Clade". <i>Microbiology of Aquatic Systems</i> , 65, 302–310. https://doi.org/10.1007/s00248-012-0170-3
HF54727 0.1	<i>Sonderia vorax</i>	Plagiopylea	-	Marine/Brackish	Modeo, L., Fokin, S. I., Boscaro, V., Andreoli, I., Ferrantini, F., Rosati, G., Verni, F., & Petroni, G. (2013). Morphology, ultrastructure, and molecular phylogeny of the ciliate <i>Sonderia vorax</i> with insights into the systematics of order Plagiopylida. <i>BMC Microbiology</i> , 13, 40. https://doi.org/10.1186/1471-2180-13-40
HM03073 8.1	<i>Stokesia vernalis</i>	Oligohymenophorea	-	Freshwater	Sonntag, B., & Sommaruga, R. (2020). Effectiveness of Photoprotective Strategies in Three Mixotrophic Planktonic Ciliate Species. <i>Diversity</i> , 12(6), 252. https://doi.org/10.3390/d12060252
HM05105 5.1	<i>Spathidiopsis socialis</i>	Armophorea	-	Marine/Brackish	Lipscomb, D. L., Bowditch, B. M., & Riordan, G. P. (2012). A molecular and ultrastructural description of <i>Spathidiopsis budenbrocki</i> and the phylogenetic position of the family Placidae (Ciliophora). <i>The Journal of Eukaryotic Microbiology</i> , 59(1), 67–79. https://doi.org/10.1111/j.1550-7408.2011.00595.x
HM05105 6.1	<i>Spathidiopsis budenbrocki</i>	Armophorea	-	Marine/Brackish	Lipscomb, D. L., Bowditch, B. M., & Riordan, G. P. (2012). A molecular and ultrastructural description of <i>Spathidiopsis budenbrocki</i> and the phylogenetic position of the family Placidae (Ciliophora). <i>The Journal of Eukaryotic Microbiology</i> , 59(1), 67–79. https://doi.org/10.1111/j.1550-7408.2011.00595.x
HM05105 7.1	<i>Placus striatus</i>	Prostomatea	-	Marine/Brackish	Lipscomb, D. L., Bowditch, B. M., & Riordan, G. P. (2012). A molecular and ultrastructural description of <i>Spathidiopsis budenbrocki</i> and the phylogenetic position of the family Placidae (Ciliophora). <i>The Journal of Eukaryotic Microbiology</i> , 59(1), 67–79. https://doi.org/10.1111/j.1550-7408.2011.00595.x
HM14038 7.1	<i>Pseudokeronopsis rubra</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Li, J., & Xu, K. (2020). Morphology and taxonomy of <i>Pseudokeronopsis rubra</i> (Ehrenberg, 1836) and <i>Pseudokeronopsis parasongi</i> sp. nov. (Ciliophora, Hypotrichia, Urostylida) from the Yellow Sea. <i>European Journal of Protistology</i> , 76, 125737. https://doi.org/10.1016/j.ejop.2020.125737
HM14038 8.1	<i>Urostyla grandis</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Paiva, T., Shao, C., Fernandes, N. M., Borges, B., & da Silva-Neto, I. D. (2016). Description and Phylogeny of <i>Urostyla grandis wiackowskii</i> subsp. nov. (Ciliophora, Hypotrichia) from an Estuarine Mangrove in Brazil. <i>The Journal of Eukaryotic Microbiology</i> , 63(2), 247–261. https://doi.org/10.1111/jeu.12273
HM14038 9.1	<i>Strombidium crassulum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Petz, W., Song, W., & Wilbert, W. (1995). Taxonomy and ecology of the ciliate fauna (Protozoa, Ciliophora) in the endopagial and pelagial of the Weddell Sea, Antarctica. <i>Stapfia</i> , 40: 1–223.
HM14039 2.1	<i>Spathidium spathula</i>	Litostomatea	Haptoria	Freshwater	Durán-Ramírez, C. A., Dias, R. J. P., & Mayén-Estrada, R. (2020). Checklist of ciliates (Alveolata: Ciliophora) that inhabit in bromeliads from the Neotropical Region. <i>Zootaxa</i> , 4895, 001-036. https://doi.org/10.11646/zootaxa.4895.1.1

HM14039 4.1	<i>Bresslauides discoideus</i>	Colpodea	-	Terrestrial	Foissner, W. (1999). Soil protozoa as bioindicators: pros and cons, methods, diversity, representative examples. <i>Agriculture, Ecosystems and Environment</i> , 74, 95–112. https://doi.org/10.1016/S0167-8809(99)00032-8
HM14039 5.1	<i>Platyophryides magnus</i>	Colpodea	-	Terrestrial	Foissner, W. (1993). Colpodea (Ciliophora). Fischer, Stuttgart. <i>Protozoenfauna</i> , 4(i-x), 1-798.
HM14039 9.1	<i>Coleps hirtus</i>	Prostomatea	-	Freshwater	Barth, D., Tischer, K., Berger, H., Schlegel, M., & Berendonk, T. U. (2008). High mitochondrial haplotype diversity of <i>Coleps</i> sp. (Ciliophora: Prostomatida). <i>Environmental Microbiology</i> , 10 (3), 626–634. https://doi.org/10.1111/j.1462-2920.2007.01486.x
HM14040 0.1	<i>Acineta flava</i>	Phyllopharyng ea	Suctorina	Freshwater	Graham, L. E., & Knack, J. J. (2015). A metagenome for lacustrine cladophora (cladophorales) reveals remarkable diversity of eukaryotic epibionts and genes relevant to materials cycling. <i>Journal of Phycology</i> , 51(3), 408-418. https://doi.org/10.1111/jpy.12296
HM14040 2.1	<i>Euplotes novemcarinatus</i>	Spirotrichea	Euplotia	Freshwater	Zhao, Y., Yi, Z., Warren, A., & Song, W. (2018). Species delimitation for the molecular taxonomy and ecology of the widely distributed microbial eukaryote genus <i>Euplotes</i> (Alveolata, Ciliophora). <i>Proceedings of the Royal Society B</i> , 285(1871), 20172159. https://doi.org/10.1098/rspb.2017.2159
HM14040 4.1	<i>Parallelostrombid ium paralatatum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Xu, D., Song, W., & Warren, A. (2006). Morphology and infraciliature of two new species of marine oligotrichid ciliates (Ciliophora: Oligotrichida) from China. <i>Journal of Natural History</i> , 40(21-22), 1287-1299. https://doi.org/10.1080/00222930600913925
HM14040 5.1	<i>Anigsteinia clarissima</i>	Heterotricha	-	Marine/Brackish	Chen, X., Kim, J. H., Shazib, S. U. A., Kwon, C. B., & Shin, M. K. (2017). Morphology and molecular phylogeny of three heterotrichid species (Ciliophora, Heterotricha), including a new species of <i>Anigsteinia</i> . <i>European Journal of Protistology</i> , 61, A, 278-293. http://dx.doi.org/10.1016/j.ejop.2017.06.005
HM14040 7.1	<i>Euplotes muscorum</i>	Spirotrichea	Euplotia	Freshwater	Jo, J. O., & Shin, M. K. (2003). Redescription of newly recorded ciliate, <i>Euplotes muscorum</i> (Ciliophora: Polyhymenophora: Hypotrichida) and comparison with related species from Korea. <i>The Korean Journal of Systematic Zoology</i> , 29(2), 227-235.
HM15453 2.1	<i>Diophrys scutum</i>	Spirotrichea	Euplotia	Marine/Brackish	Zhang, W., & Xu, H. (2015). Seasonal shift in community pattern of periphytic ciliates and its environmental drivers in coastal waters of the Yellow Sea, northern China. <i>Journal of the Marine Biological Association of the United Kingdom</i> , 95(2), 277-288. doi:10.1017/S002531541400143X
HM23633 5.1	<i>Porpostoma notata</i>	Oligohymenophorea	Scuticociliata	Symbiosis	Gao, F., Struder-Kypke, M., Yi, Z., Miao, M., Al-Farraj, S. A. & Song, W. (2012). Phylogenetic analysis and taxonomic distinction of six genera of pathogenic scuticociliates (Protozoa, Ciliophora) inferred from small-subunit rRNA gene sequences. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 62, 246-256. https://doi.org/10.1099/ijs.0.028464-0

HM23633 6.1	<i>Metanophrys sinensis</i>	Oligohymenop horea	Scuticociliati a	Marine/Brac kish	Gao, F., Struder-Kypke, M., Yi, Z., Miao, M., Al-Farraj, S. A. & Song, W. (2012). Phylogenetic analysis and taxonomic distinction of six genera of pathogenic scuticociliates (Protozoa, Ciliophora) inferred from small-subunit rRNA gene sequences. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 62, 246-256. https://doi.org/10.1099/ijms.0.028464-0
HM23633 7.1	<i>Uronemella parafillicum</i>	Oligohymenop horea	Scuticociliati a	Marine/Brac kish	Gao, F., Struder-Kypke, M., Yi, Z., Miao, M., Al-Farraj, S. A. & Song, W. (2012). Phylogenetic analysis and taxonomic distinction of six genera of pathogenic scuticociliates (Protozoa, Ciliophora) inferred from small-subunit rRNA gene sequences. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 62, 246-256. https://doi.org/10.1099/ijms.0.028464-0
HM23633 8.1	<i>Parauronema longum</i>	Oligohymenop horea	Scuticociliati a	Marine/Brac kish	Gao, F., Struder-Kypke, M., Yi, Z., Miao, M., Al-Farraj, S. A. & Song, W. (2012). Phylogenetic analysis and taxonomic distinction of six genera of pathogenic scuticociliates (Protozoa, Ciliophora) inferred from small-subunit rRNA gene sequences. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 62, 246-256. https://doi.org/10.1099/ijms.0.028464-0
HM23633 9.1	<i>Cohnilembus verminus</i>	Oligohymenop horea	Scuticociliati a	Marine/Brac kish	Gao, F., Struder-Kypke, M., Yi, Z., Miao, M., Al-Farraj, S. A. & Song, W. (2012). Phylogenetic analysis and taxonomic distinction of six genera of pathogenic scuticociliates (Protozoa, Ciliophora) inferred from small-subunit rRNA gene sequences. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 62, 246-256. https://doi.org/10.1099/ijms.0.028464-0
HM23634 0.1	<i>Ancistrum crassum</i>	Oligohymenop horea	Scuticociliati a	Symbiosis	Gao, F., Struder-Kypke, M., Yi, Z., Miao, M., Al-Farraj, S. A. & Song, W. (2012). Phylogenetic analysis and taxonomic distinction of six genera of pathogenic scuticociliates (Protozoa, Ciliophora) inferred from small-subunit rRNA gene sequences. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 62, 246-256. https://doi.org/10.1099/ijms.0.028464-0
HM56841 6.1	<i>Anteholosticha pseudomonilata</i>	Spirotrichea	Hypotrichia	Marine/Brac kish	Li, L., Khan, S. N., Ji, D., & Shin, M. K. (2011). Morphology and SSU rRNA gene sequence of the new brackish water ciliate, <i>Anteholosticha pseudomonilata</i> n. sp. (Ciliophora, Hypotrichida, Holostichidae) from Korea. <i>Zootaxa</i> , 2739, 51–59. https://doi.org/10.5281/zenodo.201911
HM56926 4.1	<i>Parasterkiella thompsoni</i>	Spirotrichea	-	Freshwater	Küppers, G. C., Paiva, T., Borges, B., Harada, M. L., Garraza, G. G., & Mataloni, G. (2011). An Antarctic hypotrichous ciliate, <i>Parasterkiella thompsoni</i> (Foissner) nov. gen., nov. comb., recorded in Argentinean peat-bogs: morphology, morphogenesis, and molecular phylogeny. <i>European Journal of Protistology</i> , 47(2), 103–123. https://doi.org/10.1016/j.ejop.2011.01.002
HM58167 3.1	<i>Trachelius ovum</i>	Litostomatea	Haptoria	Freshwater	Vd'acny, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>European Journal of Protistology</i> , 47, 295–313. https://doi.org/10.1016/j.ejop.2011.04.006

HM58167 4.1	<i>Dileptus terrenus</i>	Litostomatea	Rhynchostomata	Terrestrial	Vd'acny, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>European Journal of Protistology</i> , 47, 295–313. https://doi.org/10.1016/j.ejop.2011.04.006
HM58167 5.1	<i>Dileptus mucronatus</i>	Litostomatea	Rhynchostomata	Terrestrial	Vd'acny, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>European Journal of Protistology</i> , 47, 295–313. https://doi.org/10.1016/j.ejop.2011.04.006
HM58167 6.1	<i>Dileptus microstoma</i>	Litostomatea	Rhynchostomata	Terrestrial	Vd'acny, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>European Journal of Protistology</i> , 47, 295–313. https://doi.org/10.1016/j.ejop.2011.04.006
HM58167 7.1	<i>Pseudomonilicary on fraterculu</i>	Litostomatea	Trichostomatia	Terrestrial	Vd'acny, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>European Journal of Protistology</i> , 47, 295–313. https://doi.org/10.1016/j.ejop.2011.04.006
HM58167 8.1	<i>Apodileptus rhabdoplites</i>	Litostomatea	Haptoria	Freshwater	Vd'acny, P., Orsi, W., Bourland, W. A., Shimano, S., Epstein, S. S., & Foissner, W. (2011). Morphological and molecular phylogeny of dileptid and tracheliid ciliates: resolution at the base of the class Litostomatea (Ciliophora, Rhynchostomatia). <i>European Journal of Protistology</i> , 47(4), 295–313. https://doi.org/10.1016/j.ejop.2011.04.006
HM58167 9.1	<i>Dileptus costaricanus</i>	Litostomatea	Rhynchostomata	Terrestrial	Vd'acny, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>European Journal of Protistology</i> , 47, 295–313. https://doi.org/10.1016/j.ejop.2011.04.006
HM75026 0.1	<i>Cotterillia bromelicola</i>	Spirotrichea	-	Freshwater	Foissner, W., & Stoeck, T. (2011). <i>Cotterillia bromelicola</i> nov. gen., nov. spec., a gonostomatid ciliate (Ciliophora, Hypotricha) from tank bromeliads (Bromeliaceae) with de novo originating dorsal kineties. <i>European Journal of Protistology</i> , 47(1), 29–50. https://doi.org/10.1016/j.ejop.2010.08.003
HQ32268 1.1	<i>Pseudodiophrys nigricans</i>	Spirotrichea	-	Marine/Brackish	Jiang, J., Warren, A., & Song, W. (2011). Morphology and molecular phylogeny of two new marine euplotids, <i>Pseudodiophrys nigricans</i> n. g., n. sp., and <i>Paradiophrys zhangii</i> n. sp. (Ciliophora: Euplotida). <i>Journal of Eukaryotic Microbiology</i> , 58(5), 437–445. https://doi.org/10.1111/j.1550-7408.2011.00567.x
HQ33790 1.1	<i>Bryophrya gemmea</i>	Colpodea	-	Terrestrial	Bourland, W. A., Vd'acny, P., Davis, M. C., & Hampikian, G. (2011). Morphology, Morphometrics, and Molecular Characterization of <i>Bryophrya gemmea</i> n. sp. (Ciliophora, Colpodea): Implications for the Phylogeny and Evolutionary Scenario for the Formation of Oral Ciliature in the Order Colpodida. <i>Journal of Eukaryotic Microbiology</i> , 58 (1), 22–36.

HQ33790 2.1	<i>Maryna ovata</i>	Colpodea	-	Freshwater	Bourland, W. A., Vdacny, P., Davis, M. C., & Hampikian, G. (2011). Morphology, Morphometrics, and Molecular Characterization of <i>Bryophrya gemmea</i> n. sp. (Ciliophora, Colpodea): Implications for the Phylogeny and Evolutionary Scenario for the Formation of Oral Ciliature in the Order Colpodida. <i>Journal of Eukaryotic Microbiology</i> , 58 (1), 22-36.
HQ40738 3.1	<i>Trichodina uniforma</i>	Oligohymenophorea	Peritrichia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
HQ40738 4.1	<i>Trichodina mutabilis</i>	Oligohymenophorea	Peritrichia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
HQ40738 7.1	<i>Trichodinella epizootica</i>	Oligohymenophorea	Peritrichia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
HQ41369 4.1	<i>Moneuplotes crassus</i>	Spirotrichea	Euplotia	-	-
HQ44627 4.1	<i>Paraclautilocola elongata</i>	Oligohymenophorea	-	Symbiosis	Fokam, Z., Ngassam, P., Struder-Kypke, M. C., & Lynn, D. H. (2011). Genetic diversity and phylogenetic position of the subclass Astomatia (Ciliophora) based on a sampling of six genera from West African oligochaetes (Glossoscolecidae, Megascolecidae), including description of the new genus <i>Paraclautilocola</i> n. gen. <i>European Journal of Protistology</i> , 47(3), 161–171. https://doi.org/10.1016/j.ejop.2011.02.002
HQ44627 5.1	<i>Paraclautilocola constricta</i>	Oligohymenophorea	Astomatia	Symbiosis	Fokam, Z., Ngassam, P., Struder-Kypke, M. C., & Lynn, D. H. (2011). Genetic diversity and phylogenetic position of the subclass Astomatia (Ciliophora) based on a sampling of six genera from West African oligochaetes (Glossoscolecidae, Megascolecidae), including description of the new genus <i>Paraclautilocola</i> n. gen. <i>European Journal of Protistology</i> , 47(3), 161–171. https://doi.org/10.1016/j.ejop.2011.02.002
HQ44627 6.1	<i>Njinella prolifera</i>	Oligohymenophorea	-	Symbiosis	Fokam, Z., Ngassam, P., Struder-Kypke, M. C., & Lynn, D. H. (2011). Genetic diversity and phylogenetic position of the subclass Astomatia (Ciliophora) based on a sampling of six genera from West African oligochaetes (Glossoscolecidae, Megascolecidae), including description of the new genus <i>Paraclautilocola</i> n. gen. <i>European Journal of Protistology</i> , 47(3), 161–171. https://doi.org/10.1016/j.ejop.2011.02.002
HQ44627 8.1	<i>Metaracoelophrya intermedia</i>	Oligohymenophorea	-	Symbiosis	Fokam, Z., Ngassam, P., Struder-Kypke, M. C., & Lynn, D. H. (2011). Genetic diversity and phylogenetic position of the subclass Astomatia (Ciliophora) based on a sampling of six genera from West African oligochaetes (Glossoscolecidae, Megascolecidae), including description of the new genus <i>Paraclautilocola</i> n. gen. <i>European Journal of Protistology</i> , 47(3), 161–171. https://doi.org/10.1016/j.ejop.2011.02.002

HQ44627 9.1	<i>Metaradiophrya</i> <i>sp</i>	Oligohymenop horea	-	Symbiosis	Fokam, Z., Ngassam, P., Strüder-Kypke, M. C., & Lynn, D. H. (2011). Genetic diversity and phylogenetic position of the subclass Astomatia (Ciliophora) based on a sampling of six genera from West African oligochaetes (Glossoscolecidae, Megascolecidae), including description of the new genus <i>Paraclausilocola</i> n. gen. <i>European Journal of Protistology</i> , 47(3), 161–171. https://doi.org/10.1016/j.ejop.2011.02.002
HQ44628 0.1	<i>Eudrilophrya</i> <i>complanata</i>	Oligohymenop horea	-	Symbiosis	Fokam, Z., Ngassam, P., Strüder-Kypke, M. C., & Lynn, D. H. (2011). Genetic diversity and phylogenetic position of the subclass Astomatia (Ciliophora) based on a sampling of six genera from West African oligochaetes (Glossoscolecidae, Megascolecidae), including description of the new genus <i>Paraclausilocola</i> n. gen. <i>European Journal of Protistology</i> , 47(3), 161–171. https://doi.org/10.1016/j.ejop.2011.02.002
HQ44628 1.1	<i>Almophrya</i> <i>bivacuolata</i>	Oligohymenop horea	Scuticociliati a	Symbiosis	Fokam, Z., Ngassam, P., Strüder-Kypke, M. C., & Lynn, D. H. (2011). Genetic diversity and phylogenetic position of the subclass Astomatia (Ciliophora) based on a sampling of six genera from West African oligochaetes (Glossoscolecidae, Megascolecidae), including description of the new genus <i>Paraclausilocola</i> n. gen. <i>European Journal of Protistology</i> , 47(3), 161–171. https://doi.org/10.1016/j.ejop.2011.02.002
HQ59146 9.1	<i>Pseudocollinia</i> <i>brintoni</i>	Oligohymenop horea	Scuticociliati a	Symbiosis	Gomez-Gutierrez, J., Strüder-Kypke, M. C., Lynn, D. H., Shaw, T. C., Aguilar-Mendez, M. J., Lopez-Cortes, A., Martinez-Gomez, S., & Robinson, C. J. (2012). <i>Pseudocollinia brintoni</i> gen. nov., sp. nov. (Apostomatida: Colliniidae), a parasitoid ciliate infecting the euphausiid <i>Nyctiphanes simplex</i> . <i>Diseases of Aquatic Organisms</i> , 99(1), 57-78. https://doi.org/10.3354/dao02450
HQ59147 3.1	<i>Pseudocollinia</i> <i>oregonensis</i>	Oligohymenop horea	Scuticociliati a	Symbiosis	Lynn, D. H., Gómez-Gutiérrez, J., Strüder-Kypke, M. C., & Shaw, C. T. (2014). Ciliate species diversity and host-parasitoid codiversification in <i>Pseudocollinia</i> infecting krill, with description of <i>Pseudocollinia similis</i> sp. nov. <i>Diseases of Aquatic Organisms</i> , 112(2), 89–102. https://doi.org/10.3354/dao02796
HQ59147 8.1	<i>Pseudocollinia</i> <i>simili</i>	Oligohymenop horea	Apostomatia	Symbiosis	Lynn, D. H., Gómez-Gutiérrez, J., Strüder-Kypke, M. C., & Shaw, C. T. (2014). Ciliate species diversity and host-parasitoid codiversification in <i>Pseudocollinia</i> infecting krill, with description of <i>Pseudocollinia similis</i> sp. nov. <i>Diseases of Aquatic Organisms</i> , 112(2), 89–102. https://doi.org/10.3354/dao02796
HQ59148 1.1	<i>Pseudocollinia</i> <i>beringensi</i>	Oligohymenop horea	Apostomatia	Symbiosis	Lynn, D. H., Gómez-Gutiérrez, J., Strüder-Kypke, M. C., & Shaw, C. T. (2014). Ciliate species diversity and host-parasitoid codiversification in <i>Pseudocollinia</i> infecting krill, with description of <i>Pseudocollinia similis</i> sp. nov. <i>Diseases of Aquatic Organisms</i> , 112(2), 89–102. https://doi.org/10.3354/dao02796
HQ60594 7.1	<i>Aporthotrochilia</i> <i>pulex</i>	Phyllopharyng ea	Phyllopharyng gia	Marine/Brackish	Pan, H., Lin, X., Gong, J., AL-Rashed, K. A. S., & Song, W. (2012). Taxonomy of five species of cyrtophorids (Protozoa: Ciliophora) including consideration of the phylogeny of two new genera. <i>Zoological Journal of the Linnean Society</i> , 164(1), 1–17, https://doi.org/10.1111/j.1096-

HQ60594 8.1	<i>Arcuseries warreni</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Shao, C., Gao, F., Hu, X., Al-Rasheid, K. A., & Warren, A. (2011). Ontogenesis and molecular phylogeny of a new marine urostylid ciliate, <i>Anteholosticha petzi</i> n. sp. (Ciliophora, Urostylida). <i>The Journal of eukaryotic microbiology</i> , 58(3), 254–265. https://doi.org/10.1111/j.1550-7408.2011.00542.x
HQ66846 6.1	<i>Leptopharynx bromelicola</i>	Nassophorea	Microthoracida	Freshwater	Foissner, W., Wolf, K. W., Yashchenko, V., & Stoeck, T. (2011). Description of <i>Leptopharynx bromelicola</i> n. sp. and Characterization of the Genus <i>Leptopharynx</i> Mermod, 1914 (Protista, Ciliophora). <i>Journal of Eukaryotic Microbiology</i> , 58(2), 134-151. https://doi.org/10.1111/j.1550-7408.2011.00532.x
HQ66846 7.1	<i>Leptopharynx costatus</i>	Nassophorea	Microthoracida	Freshwater	Foissner, W., Wolf, K. W., Yashchenko, V., & Stoeck, T. (2011). Description of <i>Leptopharynx bromelicola</i> n. sp. and Characterization of the Genus <i>Leptopharynx</i> Mermod, 1914 (Protista, Ciliophora). <i>Journal of Eukaryotic Microbiology</i> , 58(2), 134-151. https://doi.org/10.1111/j.1550-7408.2011.00532.x
HQ69989 5.1	<i>Bistichella variabilis</i>	Spirotrichea	-	Terrestrial	He, Y., & Xu, K. (2011). Morphology and Small Subunit rDNA Phylogeny of a New Soil Ciliate, <i>Bistichella variabilis</i> n. sp. (Ciliophora, Stichotrichia). <i>Journal of Eukaryotic Microbiology</i> , 58(4), 332-338. https://doi.org/10.1111/j.1550-7408.2011.00554.x
HQ89598 5.1	<i>Theileria parva</i>	Aconoidasida (Apicomplexa)	Outgroup	-	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The All-Data-Based Evolutionary Hypothesis of Ciliated Protists with a Revised Classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 1-14. https://doi.org/10.1038/srep24874
JF26344 2.1	<i>Arcuospathidium tristicha</i>	Litostomatea	Haptoria	Terrestrial	Vdacny, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>Molecular Phylogenetics and Evolution</i> , 59(2), 510-522. https://doi.org/10.1016/j.ympev.2011.02.016
JF26344 4.1	<i>Balantidium pellucidum</i>	Litostomatea	Haptoria	Freshwater	Vd'ačný, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>Molecular Phylogenetics & Evolution</i> , 59(2), 510–522. https://doi.org/10.1016/j.ympev.2011.02.016

JF26344 5.1	<i>Cultellothrix lionotiformis</i>	Litostomatea	Haptoria	Terrestrial	Vdacny, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>Molecular Phylogenetics and Evolution</i> , 59(2), 510-522. https://doi.org/10.1016/j.ympev.2011.02.016
JF26344 6.1	<i>Enchelyodon sp</i>	Litostomatea	Haptoria	Terrestrial	Vdacny, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>Molecular Phylogenetics and Evolution</i> , 59(2), 510-522. https://doi.org/10.1016/j.ympev.2011.02.016
JF26344 7.1	<i>Enchelys gasterosteus</i>	Litostomatea	Haptoria	Freshwater	Vdacny, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>Molecular Phylogenetics and Evolution</i> , 59(2), 510-522.
JF26344 9.1	<i>Protospathidium muscolola</i>	Litostomatea	Haptoria	Terrestrial	Vdacny, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>Molecular Phylogenetics and Evolution</i> , 59(2), 510-522. https://doi.org/10.1016/j.ympev.2011.02.016
JF26345 0.1	<i>Semispathidium sp</i>	Litostomatea	Haptoria	Terrestrial	Vdacny, P., Bourland, W. A., Orsi, W., Epstein, S. S., & Foissner, W. (2011). Phylogeny and classification of the Litostomatea (Protista, Ciliophora), with emphasis on free-living taxa and the 18S rRNA gene. <i>Molecular Phylogenetics and Evolution</i> , 59(2), 510-522. https://doi.org/10.1016/j.ympev.2011.02.016
JF43755 8.1	<i>Geleia sinica</i>	Karyorelictea	-	Marine/Brackish	Xu, Y., Huang, J., Warren, A., Al-Rasheid, K. A., Al-Farraj, S. A., & Song, W. (2011). Morphological and molecular information of a new species of <i>Geleia</i> (Ciliophora, Karyorelictea), with redescription of two <i>Kentrophoros</i> species from China. <i>European Journal of Protistology</i> , 47(3), 172–185. https://doi.org/10.1016/j.ejop.2011.03.003
JF69404 1.1	<i>Diophrys appendiculata</i>	Spirotrichea	Euplotia	Marine/Brackish	Huang, J., Dunthorn, M., & Song, W. (2012). Expanding character sampling for the molecular phylogeny of euplotid ciliates (Protozoa, Ciliophora) using three markers, with a focus on the family Uronychiidae. <i>Molecular Phylogenetics and Evolution</i> 63(3), 598-605. https://doi.org/10.1016/j.ympev.2012.02.007
JF69404 4.1	<i>Protocruzia granulosa</i>	Protocruzidea	Protocruziida	Marine/Brackish	Huang, J., Dunthorn, M., & Song, W. (2012). Expanding character sampling for the molecular phylogeny of euplotid ciliates (Protozoa, Ciliophora) using three markers, with a focus on the family Uronychiidae. <i>Molecular Phylogenetics and Evolution</i> , 63(3), 598-605. https://doi.org/10.1016/j.ympev.2012.02.007

JF71864 4.1	<i>Apokeronopsis bergeri</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Jung, J.-H., Baek, Y.-S., & Min, G.-S. (2011). New Record of Two <i>Apokeronopsis</i> Species (Ciliophora: Urostyliida: Pseudokeronopsidae) from Korea. <i>Korean Journal of Systematic Zoology</i> , 27(2) 115-122. https://doi.org/10.5635/KJSZ.2011.27.2.115
JF74721 4.1	<i>Exocolpoda augustini</i>	Colpodea	-	Terrestrial	Foissner, W., Stoeck, T., Agatha, S., & Dunthorn, M. (2011). Intra-class Evolution and Classification of the Colpodea (Ciliophora). <i>Journal of Eukaryotic Microbiology</i> , 58(5), 397-415. https://doi.org/10.1111/j.1550-7408.2011.00566.x
JF74721 7.1	<i>Maryna umbrellata</i>	Colpodea	-	Freshwater	Foissner, W., Stoeck, T., Agatha, S., & Dunthorn, M. (2011). Intra-class Evolution and Classification of the Colpodea (Ciliophora). <i>Journal of Eukaryotic Microbiology</i> , 58(5), 397-415. https://doi.org/10.1111/j.1550-7408.2011.00566.x
JF74721 9.1	<i>Pseudomaryna sp</i>	Colpodea	-	Terrestrial	Foissner, W., Stoeck, T., Agatha, S., & Dunthorn, M. (2011). Intra-class Evolution and Classification of the Colpodea (Ciliophora). <i>Journal of Eukaryotic Microbiology</i> , 58(5), 397-415. https://doi.org/10.1111/j.1550-7408.2011.00566.x
JF79101 6.1	<i>Strombidium basimorphum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Zhang, Q., Yi, Z., Xu, D., Al-Rasheid, K. A. S., Gong, J., & Song, W. (2010). Molecular phylogeny of oligotrich genera <i>Omegastrombidium</i> and <i>Novistrombidium</i> (Protozoa, Ciliophora) for the systematical relationships within Family Strombidiidae. <i>Chinese Journal of Oceanology and Limnology</i> , 28, 769-777). https://doi.org/10.1007/s00343-010-9096-0
JF80090 8.1	<i>Apotrachelocerca arenicola</i>	Karyorelictea	-	Marine/Brackish	Xu, Y., Li, J., Gao, F., Hu, X., & Al-Rasheid, K. A. (2011). <i>Apotrachelocerca arenicola</i> (Kahl, 1933) n. g., comb. n. (Protozoa, Ciliophora, Trachelocercidae): morphology and phylogeny. <i>The Journal of Eukaryotic Microbiology</i> , 58(6), 504-510. https://doi.org/10.1111/j.1550-7408.2011.00578.x
JF90380 0.1	<i>Euplotes euryhalinus</i>	Spirotrichea	Euplotia	Marine/Brackish	Valbonesi, A., & Luporini, P. (1990). Description of two new species of <i>Euplotes</i> and <i>Euplotes rariseti</i> from Antarctica. <i>Polar Biology</i> , 11, 47-53 (1990). https://doi.org/10.1007/BF00236521
JF90673 0.1	<i>Metaurostylopsis antarctica</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Jung, J.-H., Baek, Y.-S., Kim, S., Choi, H.-G., & Min, G.-S. (2011). A New Marine Ciliate, <i>Metaurostylopsis antarctica</i> nov. spec. (Ciliophora, Urostyliida) from the Antarctic Ocean. <i>Acta Protozoologica</i> , 50, 289-300.
JN00894 2.1	<i>Apobakuella fusca</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Jiang, J., Huang, J., Li, L., Shao, C., Al-Rasheid, K. A., Al-Farraj, S. A., & Chen, Z. (2013). Morphology, ontogeny, and molecular phylogeny of two novel bakuellid-like hypotrichs (Ciliophora: Hypotrichia), with establishment of two new genera. <i>European Journal of Protistology</i> , 49(1), 78-92 http://dx.doi.org/10.1016/j.ejop.2012.05.003
JN00894 3.1	<i>Parabistichella variabilis</i>	Spirotrichea	-	Freshwater	Jiang, J., Huang, J., Li, L., Shao, C., Al-Rasheid, K. A., Al-Farraj, S. A., & Chen, Z. (2013). Morphology, ontogeny, and molecular phylogeny of two novel bakuellid-like hypotrichs (Ciliophora: Hypotrichia), with establishment of two new genera. <i>European Journal of Protistology</i> , 49(1), 78-92 http://dx.doi.org/10.1016/j.ejop.2012.05.003

JN12020 1.1	<i>Opisthonecta henneguyi</i>	Oligohymenop horea	Peritrichia	Freshwater	Sun, P., Clamp, J., Xu, D., Kusuoka, Y., & Miao, W. (2012). <i>Vorticella</i> Linnaeus, 1767 (Ciliophora, Oligohymenophora, Peritrichia) is a grade not a clade: redefinition of <i>Vorticella</i> and the families Vorticellidae and Astylozoidae using molecular characters derived from the gene coding for small subunit ribosomal RNA. <i>Protist</i> , 163(1), 129–142. https://doi.org/10.1016/j.protis.2011.06.005
JN12020 3.1	<i>Vorticella infusioformis</i>	Oligohymenop horea	Peritrichia	Freshwater	Sun, P., Clamp, J., Xu, D., Kusuoka, Y., & Miao, W. (2012). <i>Vorticella</i> Linnaeus, 1767 (Ciliophora, Oligohymenophora, Peritrichia) is a grade not a clade: redefinition of <i>Vorticella</i> and the families Vorticellidae and Astylozoidae using molecular characters derived from the gene coding for small subunit ribosomal RNA. <i>Protist</i> , 163(1), 129–142. https://doi.org/10.1016/j.protis.2011.06.005
JN12021 3.1	<i>Vorticella aequilata</i>	Oligohymenop horea	Peritrichia	Freshwater	Sun, P., Clamp, J., Xu, D., Kusuoka, Y., & Miao, W. (2012). <i>Vorticella</i> Linnaeus, 1767 (Ciliophora, Oligohymenophora, Peritrichia) is a grade not a clade: redefinition of <i>Vorticella</i> and the families Vorticellidae and Astylozoidae using molecular characters derived from the gene coding for small subunit ribosomal RNA. <i>Protist</i> , 163(1), 129–142. https://doi.org/10.1016/j.protis.2011.06.005
JN12021 7.1	<i>Vorticella elongata</i>	Oligohymenop horea	Peritrichia	Freshwater	Sun, P., Clamp, J., Xu, D., Kusuoka, Y., & Miao, W. (2012). <i>Vorticella</i> Linnaeus, 1767 (Ciliophora, Oligohymenophora, Peritrichia) is a grade not a clade: redefinition of <i>Vorticella</i> and the families Vorticellidae and Astylozoidae using molecular characters derived from the gene coding for small subunit ribosomal RNA. <i>Protist</i> , 163(1), 129–142. https://doi.org/10.1016/j.protis.2011.06.005
JN12022 6.1	<i>Vorticella citrina</i>	Oligohymenop horea	Peritrichia	Freshwater	Sun, P., Clamp, J., Xu, D., Kusuoka, Y., & Miao, W. (2012). <i>Vorticella</i> Linnaeus, 1767 (Ciliophora, Oligohymenophora, Peritrichia) is a grade not a clade: redefinition of <i>Vorticella</i> and the families Vorticellidae and Astylozoidae using molecular characters derived from the gene coding for small subunit ribosomal RNA. <i>Protist</i> , 163(1), 129–142. https://doi.org/10.1016/j.protis.2011.06.005
JN12023 0.1	<i>Vorticella fusca</i>	Oligohymenop horea	Peritrichia	Marine/Brackish	Sun, P., Song, W., Clamp, J., & Al-Rasheid, K. A. (2006). Taxonomic characterization of <i>Vorticella fusca</i> Precht, 1935 and <i>Vorticella parapulchella</i> n. sp., two marine peritrichs (Ciliophora, Oligohymenophorea) from China. <i>The Journal of eukaryotic microbiology</i> , 53(5), 348–357. https://doi.org/10.1111/j.1550-7408.2006.00112.x
JN12023 6.1	<i>Vorticella simili</i>	Oligohymenop horea	Peritrichia	Freshwater	Sun, P., Clamp, J., Xu, D., Kusuoka, Y., & Miao, W. (2012). <i>Vorticella</i> Linnaeus, 1767 (Ciliophora, Oligohymenophora, Peritrichia) is a grade not a clade: redefinition of <i>Vorticella</i> and the families Vorticellidae and Astylozoidae using molecular characters derived from the gene coding for small subunit ribosomal RNA. <i>Protist</i> , 163(1), 129–142. https://doi.org/10.1016/j.protis.2011.06.005

JN12025 1.1	<i>Vorticella campanula</i>	Oligohymenophorea	Peritrichia	Freshwater	Sun, P., Clamp, J., Xu, D., Kusuoka, Y., & Miao, W. (2012). <i>Vorticella</i> Linnaeus, 1767 (Ciliophora, Oligohymenophora, Peritrichia) is a grade not a clade: redefinition of <i>Vorticella</i> and the families Vorticellidae and Astylozoidae using molecular characters derived from the gene coding for small subunit ribosomal RNA. <i>Protist</i> , 163(1), 129–142. https://doi.org/10.1016/j.protis.2011.06.005
JN17299 6.1	<i>Diophrys blakeneyensis</i>	Spirotrichea	Euplotia	Marine/Brackish	Hu, X., Huang, J., & Warren, A. (2012). The morphology and phylogeny of two euplotid ciliates, <i>Diophrys blakeneyensis</i> spec. nov. and <i>Diophrys oligothrix</i> Borror, 1965 (Protozoa, Ciliophora, Euplotida). <i>International Journal of Systematic & Evolutionary Microbiology</i> , 62(Pt 11), 2757–2773. https://doi.org/10.1099/ijs.0.039503-0
JN71265 7.1	<i>Parallelostrombidium conicum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Liu, W., Yi, Z., Li, J., Warren, A., Al-Farraj, S. A., & Lin, X. (2013). Taxonomy, morphology and phylogeny of three new oligotrich ciliates (Protozoa, Ciliophora, Oligotrichia) from southern China. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 63(Pt 12), 4805–4817. https://doi.org/10.1099/ijs.0.052878-0
JN71265 8.1	<i>Spirostrombidium subtropicum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Liu, W., Yi, Z., Li, J., Warren, A., Al-Farraj, S. A., & Lin, X. (2013). Taxonomy, morphology and phylogeny of three new oligotrich ciliates (Protozoa, Ciliophora, Oligotrichia) from southern China. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 63(Pt 12), 4805–4817. https://doi.org/10.1099/ijs.0.052878-0
JN71447 6.1	<i>Pseudokeronopsis carnea</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Baek, Y-S., Jung, J-H., & Min, G-S. (2011). Redescription of Two Marine Ciliates (Ciliophora: Urostylida: Pseudokeronopsidae), <i>Pseudokeronopsis carnea</i> and <i>Uroleptopsis citrina</i> , from Korea. <i>The Korean Society of Systematic Zoology</i> , 27 (3), 220-227. https://doi.org/10.5635/KJSZ.2011.27.3.220
JN83178 6.1	<i>Helicostomella subulata</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Santoferrara, L. F., McManus, G. B., & Alder, V. A. (2013). Utility of genetic markers and morphology for species discrimination within the order Tintinnida (Ciliophora, Spirotrichea). <i>Protist</i> , 164(1), 24–36. https://doi.org/10.1016/j.protis.2011.12.002
JN83179 3.1	<i>Stenosemella pacifica</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Santoferrara, L. F., McManus, G. B., & Alder, V. A. (2013). Utility of genetic markers and morphology for species discrimination within the order Tintinnida (Ciliophora, Spirotrichea). <i>Protist</i> , 164(1), 24–36. https://doi.org/10.1016/j.protis.2011.12.002
JN83179 7.1	<i>Tintinnidium balechi</i>	Spirotrichea	Choreotrichia	Freshwater	Santoferrara, L. F., McManus, G. B., & Alder, V. A. (2013). Utility of genetic markers and morphology for species discrimination within the order Tintinnida (Ciliophora, Spirotrichea). <i>Protist</i> , 164(1), 24–36. https://doi.org/10.1016/j.protis.2011.12.002

JN83181 0.1	<i>Tintinnopsis buetschlii</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., McManus, G. B., & Alder, V. A. (2013). Utility of genetic markers and morphology for species discrimination within the order Tintinnida (Ciliophora, Spirotrichea). <i>Protist</i> , 164(1), 24–36. https://doi.org/10.1016/j.protis.2011.12.002
JN83181 4.1	<i>Tintinnopsis lobiancoi</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., McManus, G. B., & Alder, V. A. (2013). Utility of genetic markers and morphology for species discrimination within the order Tintinnida (Ciliophora, Spirotrichea). <i>Protist</i> , 164(1), 24–36. https://doi.org/10.1016/j.protis.2011.12.002
JN83181 6.1	<i>Tintinnopsis major</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Rubin, E., & McManus, G. B. (2018). Global and local DNA (meta)barcoding reveal new biogeography patterns in tintinnid ciliates. <i>Journal of Plankton Research</i> , 40 (3), 209–221. https://doi.org/10.1093/plankt/fby011
JN83182 1.1	<i>Tintinnopsis nana</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Mayén-Estrada, R., Olvera-Bautista, F., Reyes-Santos, M., Durán-Ramírez, C. A., & Medina-Durán, J. H. (2019). Tintinnids (Ciliophora: Tintinnida) from Mexico: a checklist. <i>Biología</i> 75, 969–987. https://doi.org/10.2478/s11756-019-00354-4
JN83182 4.1	<i>Tintinnopsis parva</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., McManus, G. B., & Alder, V. A. (2013). Utility of genetic markers and morphology for species discrimination within the order Tintinnida (Ciliophora, Spirotrichea). <i>Protist</i> , 164(1), 24–36. https://doi.org/10.1016/j.protis.2011.12.002
JN83183 2.1	<i>Stylicauda platensi</i>	Spirotrichea	-	Marine/Brac kish	Santoferrara, L. F., McManus, G. B., & Alder, V. A. (2013). Utility of genetic markers and morphology for species discrimination within the order Tintinnida (Ciliophora, Spirotrichea). <i>Protist</i> , 164(1), 24–36. https://doi.org/10.1016/j.protis.2011.12.002
JN83183 4.1	<i>Tintinnopsis rapa</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., McManus, G. B., & Alder, V. A. (2012). Phylogeny of the order Tintinnida (Ciliophora, Spirotrichea) inferred from small- and large-subunit rRNA genes. <i>Journal of Eukaryotic Microbiology</i> , 59, 423–426. https://doi.org/10.1111/j.1550-7408.2012.00627.x
JN83183 8.1	<i>Tintinnopsis uruguayensis</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., McManus, G. B., & Alder, V. A. (2012). Phylogeny of the order Tintinnida (Ciliophora, Spirotrichea) inferred from small- and large-subunit rRNA genes. <i>Journal of Eukaryotic Microbiology</i> , 59, 423–426. https://doi.org/10.1111/j.1550-7408.2012.00627.x
JN83184 4.1	<i>Tintinnopsis acuminata</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., McManus, G. B., & Alder, V. A. (2013). Utility of genetic markers and morphology for species discrimination within the order Tintinnida (Ciliophora, Spirotrichea). <i>Protist</i> , 164(1), 24–36. https://doi.org/10.1016/j.protis.2011.12.002
JN83184 8.1	<i>Tintinnopsis tenuis</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Mayén-Estrada, R., Olvera-Bautista, F., Reyes-Santos, M., Durán-Ramírez, C. A., & Medina-Durán, J. H. (2019). Tintinnids (Ciliophora: Tintinnida) from Mexico: a checklist. <i>Biología</i> 75, 969–987. https://doi.org/10.2478/s11756-019-00354-4

JN83185 0.1	<i>Tintinnopsis kiangsuensis</i>	Spirotrichea	Choreotrichi a	Freshwater	Santoferrara, L. F., McManus, G. B., & Alder, V. A. (2012). Phylogeny of the order Tintinnida (Ciliophora, Spirotrichea) inferred from small- and large-subunit rRNA genes. <i>Journal of Eukaryotic Microbiology</i> , 59, 423-426. https://doi.org/10.1111/j.1550-7408.2012.00627.x
JN83185 2.1	<i>Tintinnopsis urnula</i>	Spirotrichea	Choreotrichi a	Marine/Brackish	Santoferrara, L. F., McManus, G. B., & Alder, V. A. (2013). Utility of genetic markers and morphology for species discrimination within the order Tintinnida (Ciliophora, Spirotrichea). <i>Protist</i> , 164(1), 24-36. https://doi.org/10.1016/j.protis.2011.12.002
JN83185 5.1	<i>Tintinnopsis pseudocylindrica</i>	Spirotrichea	Choreotrichi a	Marine/Brackish	Santoferrara, L. F., McManus, G. B., & Alder, V. A. (2013). Utility of genetic markers and morphology for species discrimination within the order Tintinnida (Ciliophora, Spirotrichea). <i>Protist</i> , 164(1), 24-36. https://doi.org/10.1016/j.protis.2011.12.002
JN83635 1.1	<i>Myoschiston duplicatum</i>	Oligohymenophorea	Peritrichia	Marine/Brackish	Sun, P., Xu, D., Clamp, J. C., & Shin, M. K. (2012). Molecular and morphological characterization of a poorly known marine ciliate, <i>Myoschiston duplicatum</i> precht 1935: implications for phylogenetic relationships between three morphologically similar genera -- <i>Zoothamnium</i> , <i>Myoschiston</i> , and <i>Zoothamnopsis</i> (Ciliophora, Peritrichia, Zoothamniidae). <i>The Journal of Eukaryotic Microbiology</i> , 59(2), 163-170. https://doi.org/10.1111/j.1550-7408.2011.00609.x
JN85794 1.1	<i>Parasonderia vestita</i>	Plagiopylea	-	Marine/Brackish	Xu, Y., Shao, C., Miao, M., & Song, W. (2013). Redescription of <i>Parasonderia vestita</i> (Kahl, 1928) comb. nov. (Ciliophora, Plagiopylida), with notes on its phylogeny based on SSU rRNA gene. <i>European Journal of Protistology</i> , 49(1), 106-113. https://doi.org/10.1016/j.ejop.2012.03.001
JN86701 6.1	<i>Trochilia petrani</i>	Phyllopharyng ea	Phyllopharyng gia	Marine/Brackish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngia). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198
JN86701 7.1	<i>Trochilioides recta</i>	Phyllopharyng ea	Phyllopharyng gia	Marine/Brackish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngia). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198
JN86701 8.1	<i>Trochochilodon flavus</i>	Phyllopharyng ea	Phyllopharyng gia	Marine/Brackish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngia). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198
JN86701 9.1	<i>Hypocoma acinetarum</i>	Phyllopharyng ea	Rhynchodia	Marine/Brackish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngia). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198

JN86702 0.1	<i>Microdysteria decora</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngae). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198
JN86702 1.1	<i>Pseudochilodopsis fluviatilis</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Gao, S., Huang, J., Li, J., & Song, W. (2012). Molecular phylogeny of the cyrtophorid ciliates (Protozoa, Ciliophora, Phyllopharyngae). <i>PLoS ONE</i> , 7(3), E33198. https://doi.org/10.1371/journal.pone.0033198
JN87172 0.1	<i>Eutintinnus pectinis</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Bachvaroff, T. R., Kim, S., Guillou, L., Delwiche, C. F., & Coats, D. W. (2012). Molecular Diversity of the Syndinean Genus <i>Euduboscquella</i> Based on Single-Cell PCR Analysis. <i>Applied and Environmental Microbiology</i> , 78 (2), 334-345. https://doi.org/10.1128/AEM.06678-11
JN87172 1.1	<i>Eutintinnus tenuis</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Bachvaroff, T. R., Kim, S., Guillou, L., Delwiche, C. F., & Coats, D. W. (2012). Molecular Diversity of the Syndinean Genus <i>Euduboscquella</i> Based on Single-Cell PCR Analysis. <i>Applied and Environmental Microbiology</i> , 78 (2), 334-345. https://doi.org/10.1128/AEM.06678-11
JN87172 2.1	<i>Eutintinnus fraknoi</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Bachvaroff, T. R., Kim, S., Guillou, L., Delwiche, C. F., & Coats, D. W. (2012). Molecular Diversity of the Syndinean Genus <i>Euduboscquella</i> Based on Single-Cell PCR Analysis. <i>Applied and Environmental Microbiology</i> , 78 (2), 334-345. https://doi.org/10.1128/AEM.06678-11
JN87172 5.1	<i>Favella markusovszkyi</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Bachvaroff, T. R., Kim, S., Guillou, L., Delwiche, C. F., & Coats, D. W. (2012). Molecular Diversity of the Syndinean Genus <i>Euduboscquella</i> Based on Single-Cell PCR Analysis. <i>Applied and Environmental Microbiology</i> , 78 (2), 334-345. https://doi.org/10.1128/AEM.06678-11
JN87172 6.1	<i>Favella arcuata</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Bachvaroff, T. R., Kim, S., Guillou, L., Delwiche, C. F., & Coats, D. W. (2012). Molecular Diversity of the Syndinean Genus <i>Euduboscquella</i> Based on Single-Cell PCR Analysis. <i>Applied and Environmental Microbiology</i> , 78 (2), 334-345. https://doi.org/10.1128/AEM.06678-11
JN97445 3.1	<i>Loxophyllum caudatum</i>	Litostomatea	Haptoria	Marine/Brac kish	Pan, H., Gao, F., Lin, X., Warren, A., & Song, W. (2013). Three new <i>Loxophyllum</i> species (Ciliophora: Pleurostomatida) from China with a brief review of the marine and brackish <i>Loxophyllum</i> species. <i>The Journal of Eukaryotic Microbiology</i> , 60(1), 44–56. https://doi.org/10.1111/jeu.12005
JN97445 4.1	<i>Loxophyllum rugosum</i>	Litostomatea	Haptoria	Marine/Brac kish	Pan, H., Gao, F., Lin, X., Warren, A., & Song, W. (2013). Three new <i>Loxophyllum</i> species (Ciliophora: Pleurostomatida) from China with a brief review of the marine and brackish <i>Loxophyllum</i> species. <i>The Journal of Eukaryotic Microbiology</i> , 60(1), 44–56. https://doi.org/10.1111/jeu.12005
JN97445 5.1	<i>Loxophyllum chinense</i>	Litostomatea	Haptoria	Marine/Brac kish	Pan, H., Gao, F., Lin, X., Warren, A., & Song, W. (2013). Three new <i>Loxophyllum</i> species (Ciliophora: Pleurostomatida) from China with a brief review of the marine and brackish <i>Loxophyllum</i> species. <i>The Journal of Eukaryotic Microbiology</i> , 60(1), 44–56. https://doi.org/10.1111/jeu.12005

JQ08360 0.1	<i>Heterokeronopsis pulchra</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Pan, Y., Li, J., Li, L., Hu, X., Al-Rasheid, K. A., & Warren, A. (2013). Ontogeny and molecular phylogeny of a new marine ciliate genus, <i>Heterokeronopsis</i> g. n. (Protozoa, Ciliophora, Hypotricha), with description of a new species. <i>European Journal of Protistology</i> , 49(2), 298–311. https://doi.org/10.1016/j.ejop.2012.08.008
JQ35686 6.1	<i>Bromeliothrix metopoides</i>	Colpodea	-	Freshwater	Bourland, W. A., Hampikian, G., & Vdacny, P. (2012). Morphology and phylogeny of a new woodruffiid ciliate, <i>Etoschophrya inornata</i> sp. n. (Ciliophora, Colpodea, Platyophryida), with an account on evolution of platyophryids. <i>Zoologica Scripta</i> , 41 (4), 400-416. https://doi.org/10.1111/j.1463-6409.2012.00539.x
JQ35686 7.1	<i>Etoschophrya inornata</i>	Colpodea	-	Freshwater	Bourland, W. A., Hampikian, G., & Vdacny, P. (2012). Morphology and phylogeny of a new woodruffiid ciliate, <i>Etoschophrya inornata</i> sp. n. (Ciliophora, Colpodea, Platyophryida), with an account on evolution of platyophryids. <i>Zoologica Scripta</i> , 41 (4), 400-416. https://doi.org/10.1111/j.1463-6409.2012.00539.x
JQ35686 8.1	<i>Kuklikophrya ougandae</i>	Colpodea	-	Freshwater	Bourland, W. A., Hampikian, G., & Vdacny, P. (2012). Morphology and phylogeny of a new woodruffiid ciliate, <i>Etoschophrya inornata</i> sp. n. (Ciliophora, Colpodea, Platyophryida), with an account on evolution of platyophryids. <i>Zoologica Scripta</i> , 41 (4), 400-416. https://doi.org/10.1111/j.1463-6409.2012.00539.x
JQ35686 9.1	<i>Woodruffides metabolicus</i>	Colpodea	-	Freshwater	Bourland, W. A., Hampikian, G., & Vdacny, P. (2012). Morphology and phylogeny of a new woodruffiid ciliate, <i>Etoschophrya inornata</i> sp. n. (Ciliophora, Colpodea, Platyophryida), with an account on evolution of platyophryids. <i>Zoologica Scripta</i> , 41 (4), 400-416. https://doi.org/10.1111/j.1463-6409.2012.00539.x
JQ40816 1.1	<i>Tintinnopsis lacustris</i>	Spirotrichea	Choreotrichia	Freshwater	Bachy, C., Gómez, F., López-García, P., Dolan, J. R., & Moreira, D. (2012). Molecular Phylogeny of Tintinnid Ciliates (Tintinnida, Ciliophora). <i>Protist</i> , 163, 873-887. doi: 10.1016/j.protis.2012.01.001
JQ40816 7.1	<i>Codonaria cistellula</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Bachy, C., Gómez, F., López-García, P., Dolan, J. R., & Moreira, D. (2012). Molecular phylogeny of tintinnid ciliates (Tintinnida, Ciliophora). <i>Protist</i> , 163(6), 873–887. https://doi.org/10.1016/j.protis.2012.01.001
JQ40817 3.1	<i>Codonellopsis morchella</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Bachy, C., Gómez, F., López-García, P., Dolan, J. R., & Moreira, D. (2012). Molecular Phylogeny of Tintinnid Ciliates (Tintinnida, Ciliophora). <i>Protist</i> , 163, 873-887. doi: 10.1016/j.protis.2012.01.001
JQ40821 4.1	<i>Undella marsupialis</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Bachy, C., Gómez, F., López-García, P., Dolan, J. R., & Moreira, D. (2012). Molecular Phylogeny of Tintinnid Ciliates (Tintinnida, Ciliophora). <i>Protist</i> , 163, 873-887. doi: 10.1016/j.protis.2012.01.001

JQ42483 1.1	<i>Apokeronopsis crassa</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Huang, J., Chen, Z., Song, W., & Berger, H. (2014). Three-gene based phylogeny of the Urostyloidea (Protista, Ciliophora, Hypotricha), with notes on classification of some core taxa. <i>Molecular Phylogenetics and Evolution</i> , 70, 337-347. https://doi.org/10.1016/j.ympev.2013.10.005
JQ42483 2.1	<i>Metaurostyloopsis struederkypkeae</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Huang, J., Chen, Z., Song, W., & Berger, H. (2014). Three-gene based phylogeny of the Urostyloidea (Protista, Ciliophora, Hypotricha), with notes on classification of some core taxa. <i>Molecular Phylogenetics & Evolution</i> , 70, 337-347. https://doi.org/10.1016/j.ympev.2013.10.005
JQ42483 4.1	<i>Diaxonella trimarginata</i>	Spirotrichea	Stichotrichia	Freshwater	Huang, J., Chen, Z., Song, W., & Berger, H. (2014). Three-gene based phylogeny of the Urostyloidea (Protista, Ciliophora, Hypotricha), with notes on classification of some core taxa. <i>Molecular Phylogenetics and Evolution</i> , 70, 337-347. https://doi.org/10.1016/j.ympev.2013.10.005
JQ51338 6.2	<i>Australocirrus shii</i>	Spirotrichea	Hypotrichia	Freshwater	Singh, J., Kamra, K., & Sapra, G. R. (2013). Morphology, ontogenesis, and molecular phylogeny of an Indian population of <i>Cyrtohymena</i> (Cyrtohymenides) shii, including remarks on the subgenus. <i>European Journal of Protistology</i> , 49(2), 283-297. https://doi.org/10.1016/j.ejop.2012.08.009
JQ66386 7.1	<i>Leiotrocha serpularum</i>	Oligohymenophorea	Peritrichia	Symbiosis	Zhan, Z., Xu, K. & Dunthorn, M. (2013). Evaluating molecular support for and against the monophyly of the Peritrichia and phylogenetic relationships within the Mobilida (Ciliophora, Oligohymenophorea). <i>Zoologica Scripta</i> , 4, 213-226. https://doi.org/10.1111/j.1463-6409.2012.00568.x
JQ66386 8.2	<i>Trichodina pectenis</i>	Oligohymenophorea	Peritrichia	Symbiosis	Bachy, C., Gómez, F., López-García, P., Dolan, J. R., & Moreira, D. (2012). Molecular phylogeny of tintinnid ciliates (Tintinnida, Ciliophora). <i>Protist</i> , 163(6), 873-887. https://doi.org/10.1016/j.protis.2012.01.001
JQ66387 0.1	<i>Urceolaria korschelti</i>	Oligohymenophorea	Peritrichia	Symbiosis	Bachy, C., Gómez, F., López-García, P., Dolan, J. R., & Moreira, D. (2012). Molecular phylogeny of tintinnid ciliates (Tintinnida, Ciliophora). <i>Protist</i> , 163(6), 873-887. https://doi.org/10.1016/j.protis.2012.01.001
JQ72396 2.1	<i>Apocyrtolephosis minor</i>	Colpodea	-	Freshwater	Dunthorn, M., Stoeck, T., Wolf, K., Breiner, H.-W., & Foissner, W. (2012). Diversity and endemism of ciliates inhabiting Neotropical phytotelmata. <i>Systematics and Biodiversity</i> , 10(2), 1-11. https://doi.org/10.1080/14772000.2012.685195
JQ72396 5.1	<i>Fuscheria terricola</i>	Litostomatea	Haptoria	Freshwater	Vďačný, P., Breiner, H. W., Yashchenko, V., Dunthorn, M., Stoeck, T., & Foissner, W. (2014). The chaos prevails: molecular phylogeny of the Haptoria (Ciliophora, Litostomatea). <i>Protist</i> , 165(1), 93-111. https://doi.org/10.1016/j.protis.2013.11.001
JQ72397 2.1	<i>Lagynophrya acuminata</i>	Litostomatea	Haptoria	Terrestrial	Vďačný, P., Breiner, H. W., Yashchenko, V., Dunthorn, M., Stoeck, T., & Foissner, W. (2014). The chaos prevails: molecular phylogeny of the Haptoria (Ciliophora, Litostomatea). <i>Protist</i> , 165(1), 93-111. https://doi.org/10.1016/j.protis.2013.11.001

JQ72397 6.1	<i>Oxytricha ottowi</i>	Spirotrichea	Hypotrichia	Freshwater	Dunthorn, M., Stoeck, T., Wolf, K., Breiner, H.-W., & Foissner, W. (2012). Diversity and endemism of ciliates inhabiting Neotropical phytotelmata. <i>Systematics and Biodiversity</i> , 10(2), 1–11. https://doi.org/10.1080/14772000.2012.685195
JQ72398 4.1	<i>Tokophrya infusionum</i>	Phyllopharyng ea	Suctorina	Freshwater	Dunthorn, M., Stoeck, T., Wolf, K., Breiner, H.-W., & Foissner, W. (2012). Diversity and endemism of ciliates inhabiting Neotropical phytotelmata. <i>Systematics and Biodiversity</i> , 10(2), 1–11. https://doi.org/10.1080/14772000.2012.685195
JQ76840 6.1	<i>Remanella minuta</i>	Karyorelictea	-	Marine/Brack ish	Xu, Y., Miao, M., Waren, A., & Song, W. (2012). Diversity of the karyorelictid ciliates: <i>Remanella</i> (Protozoa, Ciliophora, Karyorelictida) inhabiting intertidal areas of Qingdao, China, with descriptions of three species. <i>Systematics & Biodiversity</i> , 10(2), 207-219. https://doi.org/10.1080/14772000.2012.681713
JQ76840 7.1	<i>Remanella sinica</i>	Karyorelictea	-	Marine/Brack ish	Xu, Y., Miao, M., Waren, A., & Song, W. (2012). Diversity of the karyorelictid ciliates: <i>Remanella</i> (Protozoa, Ciliophora, Karyorelictida) inhabiting intertidal areas of Qingdao, China, with descriptions of three species. <i>Systematics & Biodiversity</i> , 10(2), 207-219. https://doi.org/10.1080/14772000.2012.681713
JQ76840 8.1	<i>Remanella granulosa</i>	Karyorelictea	-	Marine/Brack ish	Xu, Y., Miao, M., Waren, A., & Song, W. (2012). Diversity of the karyorelictid ciliates: <i>Remanella</i> (Protozoa, Ciliophora, Karyorelictida) inhabiting intertidal areas of Qingdao, China, with descriptions of three species. <i>Systematics & Biodiversity</i> , 10(2), 207-219. https://doi.org/10.1080/14772000.2012.681713
JQ77988 2.1	<i>Diophrys japonica</i>	Spirotrichea	Euplotia	Marine/Brack ish	Fan, Y., Warren, A., Al-Farraj, S. A., Chen, X. & Shao, C. (2013). Morphology and SSU rRNA gene-based phylogeny of two Diophrys-like ciliates from northern china, with notes on morphogenesis of Pseudodiophrys nigricans (Protozoa, Ciliophora). <i>Journal of Morphology</i> , 274, 395-403. https://doi.org/10.1002/jmor.20097
JQ78169 9.1	<i>Pelagostrobilidium liui</i>	Spirotrichea	Choreotrichi a	Marine/Brack ish	Chen, P.-C., Chiang, K.-P. and Tsai, S.-F. (2017). <i>Pelagostrobilidium liui</i> n. sp. (Ciliophora, Choreotrichida) from the Coastal Waters of Northeastern Taiwan and an Improved Description of <i>Pelagostrobilidium minutum</i> . <i>Journal of Eukaryotic Microbiology</i> , 64, 579-587. https://doi.org/10.1111/jeu.12392
JQ83781 6.1	<i>Schmidingerella arcuata</i>	Spirotrichea	Choreotrichi a	Marine/Brack ish	Agatha, S., & Struder-Kypke, M. C. (2012). Reconciling Cladistic and Genetic Analyses in Choreotrichid Ciliates (Ciliophora, Spirotricha, Oligotricha). <i>Journal of Eukaryotic Microbiology</i> , 0(0), 1-26. https://doi.org/10.1111/j.1550-7408.2012.00623.x
JQ90405 7.1	<i>Chlamydodon salinus</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brack ish	Pan, H., Li, L., Al-Rasheid, K. A., & Song, W. (2013). Morphological and molecular description of three new species of the cyrtophorid genus <i>Chlamydodon</i> (Ciliophora, Cyrtophoria). <i>The Journal of Eukaryotic Microbiology</i> , 60(1), 2–12. https://doi.org/10.1111/jeu.12001

JQ90405 8.1	<i>Chlamyodon caudatus</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Pan, H., Li, L., Al-Rasheid, K. A., & Song, W. (2013). Morphological and molecular description of three new species of the cyrtophorid genus <i>Chlamyodon</i> (Ciliophora, Cyrtophoria). <i>The Journal of Eukaryotic Microbiology</i> , 60(1), 2–12. https://doi.org/10.1111/jeu.12001
JQ90405 9.1	<i>Chlamyodon paramnemosyne</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Pan, H., Li, L., Al-Rasheid, K. A., & Song, W. (2013). Morphological and molecular description of three new species of the cyrtophorid genus <i>Chlamyodon</i> (Ciliophora, Cyrtophoria). <i>The Journal of Eukaryotic Microbiology</i> , 60(1), 2–12. https://doi.org/10.1111/jeu.12001
JQ91836 7.1	<i>Trochilopsis australis</i>	Nassophorea	-	Marine/Brac kish	Fan, X., Pan, H., Li, L., Jiang, J., Al-Rasheid, K. A. A., & Gu, F. (2014). Phylogeny of the Poorly Known Ciliates, Microthoracida, a Systematically Confused Taxon (Ciliophora), with Morphological Reports of Three Species. <i>Journal of Eukaryotic Microbiology</i> , 61(3), 227-237. https://doi.org/10.1111/jeu.12099
JQ91836 8.1	<i>Discotricha papillifera</i>	Nassophorea	-	Marine/Brac kish	Fan, X., Pan, H., Li, L., Jiang, J., Al-Rasheid, K. A. A., & Gu, F. (2014). Phylogeny of the Poorly Known Ciliates, Microthoracida, a Systematically Confused Taxon (Ciliophora), with Morphological Reports of Three Species. <i>Journal of Eukaryotic Microbiology</i> , 61(3), 227-237. https://doi.org/10.1111/jeu.12099
JQ91837 0.1	<i>Lopezoterenia paratorpen</i>	Nassophorea	-	Marine/Brac kish	Fan, X., Pan, H., Li, L., Jiang, J., Al-Rasheid, K. A. A., & Gu, F. (2014). Phylogeny of the Poorly Known Ciliates, Microthoracida, a Systematically Confused Taxon (Ciliophora), with Morphological Reports of Three Species. <i>Journal of Eukaryotic Microbiology</i> , 61(3), 227-237. https://doi.org/10.1111/jeu.12099
JQ91837 1.2	<i>Hypotrichidium paraconicum</i>	Spirotrichea	Stichotrichia	Marine/Brac kish	Chen, L., Liu, W., Liu, A., Al-Rasheid, K. A. S., & Shao, C. (2013). Morphology and Molecular Phylogeny of a New Marine Hypotrichous Ciliate, <i>Hypotrichidium paraconicum</i> n. sp. (Ciliophora, Hypotrichia). <i>Journal of Eukaryotic Microbiology</i> , 60, 588-600. https://doi.org/10.1111/jeu.12064
JX01218 4.1	<i>Perisincirra paucicirrata</i>	Spirotrichea	Stichotrichia	Terrestrial	Li, F., Xing, Y., Li, J., Al-Rasheid, K. A., He, S., & Shao, C. (2013). Morphology, morphogenesis and small subunit rRNA gene sequence of a soil hypotrichous ciliate, <i>Perisincirra paucicirrata</i> (Ciliophora, Kahliliellidae), from the shoreline of the Yellow River, North China. <i>The Journal of Eukaryotic Microbiology</i> , 60(3), 247–256. https://doi.org/10.1111/jeu.12029
JX01218 5.1	<i>Strombidium stylifer</i>	Spirotrichea	Oligotrichia	Marine/Brac kish	Song, W., Li, J., Liu, W., Al-Rasheid, K. A. S., Hu, X., & Lin, X. (2015). Taxonomy and molecular phylogeny of four <i>Strombidium</i> species, including description of <i>S. pseudostylifer</i> sp. nov. (Ciliophora, Oligotrichia). <i>Systematics & Biodiversity</i> , 13(1), 76-92. http://dx.doi.org/10.1080/14772000.2014.970674

JX01537 3.1	<i>Remanella microstoma</i>	Karyorelictea	-	Marine/Brackish	Xu, Y., Gao, S., Hu, X., Al-Rasheid, K. A., & Song, W. (2013). Phylogeny and systematic revision of the karyorelictid genus <i>Remanella</i> (Ciliophora, Karyorelictea) with descriptions of two new species. <i>European Journal of Protistology</i> , 49(3), 438–452. https://doi.org/10.1016/j.ejop.2012.12.001
JX01537 4.1	<i>Remanella achroma</i>	Karyorelictea	-	Marine/Brackish	Xu, Y., Gao, S., Hu, X., Al-Rasheid, K. A., & Song, W. (2013). Phylogeny and systematic revision of the karyorelictid genus <i>Remanella</i> (Ciliophora, Karyorelictea) with descriptions of two new species. <i>European Journal of Protistology</i> , 49(3), 438–452. https://doi.org/10.1016/j.ejop.2012.12.001
JX01537 5.1	<i>Remanella margaritifera</i>	Karyorelictea	-	Marine/Brackish	Xu, Y., Gao, S., Hu, X., Al-Rasheid, K. A., & Song, W. (2013). Phylogeny and systematic revision of the karyorelictid genus <i>Remanella</i> (Ciliophora, Karyorelictea) with descriptions of two new species. <i>European Journal of Protistology</i> , 49(3), 438–452. https://doi.org/10.1016/j.ejop.2012.12.001
JX02516 8.1	<i>Aspidisca fusca</i>	Spirotrichea	Euplotia	Marine/Brackish	Jiang, J., Huang, J., Li, J., Al-Rasheid, K. A., Al-Farraj, S. A., Lin, X., & Hu, X. (2013). Morphology of two marine euplotids (Ciliophora: Euplotida), <i>Aspidisca fusca</i> Kahl, 1928 and <i>A. hexeris</i> Quennerstedt, 1869, with notes on their small subunit rRNA gene sequences. <i>European Journal of Protistology</i> , 49(4), 634–643. https://doi.org/10.1016/j.ejop.2013.04.005
JX02516 9.1	<i>Aspidisca hexeris</i>	Spirotrichea	Euplotia	Marine/Brackish	Jiang, J., Huang, J., Li, J., Al-Rasheid, K. A., Al-Farraj, S. A., Lin, X., & Hu, X. (2013). Morphology of two marine euplotids (Ciliophora: Euplotida), <i>Aspidisca fusca</i> Kahl, 1928 and <i>A. hexeris</i> Quennerstedt, 1869, with notes on their small subunit rRNA gene sequences. <i>European Journal of Protistology</i> , 49(4), 634–643. https://doi.org/10.1016/j.ejop.2013.04.005
JX02556 0.1	<i>Apostrombidium parakielum</i>	Spirotrichea	-	Marine/Brackish	Song, W., Li, J., Liu, W., Jiang, J., Rasheid, K., & Hu, X. (2013). Taxonomy, morphology and molecular systematics of three oligotrich ciliates, including a description of <i>Apostrombidium parakielum</i> spec. nov. (Ciliophora, Oligotrichia). <i>International Journal of Systematic & Evolutionary Microbiology</i> , 63(Pt 3), 1179–1191. https://doi.org/10.1099/ijs.0.048314-0
JX10184 9.1	<i>Amphorides amphora</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Xu, D., Sun, P., Warren, A., Noh, J. H., Choi, D. L., Shin, M. K., & Kim, Y. O. (2013). Phylogenetic investigations on ten genera of tintinnid ciliates (Ciliophora: Spirotrichea: Tintinnida), based on small subunit ribosomal RNA gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 60(2), 192–202. https://doi.org/10.1111/jeu.12023
JX10185 0.1	<i>Amphorides quadrilineata</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Xu, D., Sun, P., Warren, A., Noh, J. H., Choi, D. L., Shin, M. K., & Kim, Y. O. (2013). Phylogenetic investigations on ten genera of tintinnid ciliates (Ciliophora: Spirotrichea: Tintinnida), based on small subunit ribosomal RNA gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 60(2), 192–202. https://doi.org/10.1111/jeu.12023

JX10185 1.1	<i>Coxliella sp</i>	Spirotrichea	-	Marine/Brackish	Xu, D., Sun, P., Warren, A., Noh, J. H., Choi, D. L., Shin, M. K., & Kim, Y. O. (2013). Phylogenetic investigations on ten genera of tintinnid ciliates (Ciliophora: Spirotrichea: Tintinnida), based on small subunit ribosomal RNA gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 60(2), 192–202. https://doi.org/10.1111/jeu.12023
JX10185 2.1	<i>Dadayiella ganymedes</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Xu, D., Sun, P., Warren, A., Noh, J. H., Choi, D. L., Shin, M. K., & Kim, Y. O. (2013). Phylogenetic investigations on ten genera of tintinnid ciliates (Ciliophora: Spirotrichea: Tintinnida), based on small subunit ribosomal RNA gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 60(2), 192–202. https://doi.org/10.1111/jeu.12023
JX10185 4.1	<i>Epiplocyloides ralumensis</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Xu, D., Sun, P., Warren, A., Noh, J. H., Choi, D. L., Shin, M. K., & Kim, Y. O. (2013). Phylogenetic investigations on ten genera of tintinnid ciliates (Ciliophora: Spirotrichea: Tintinnida), based on small subunit ribosomal RNA gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 60(2), 192–202. https://doi.org/10.1111/jeu.12023
JX10185 6.1	<i>Eutintinnus tubulosus</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Xu, D., Sun, P., Warren, A., Noh, J. H., Choi, D. L., Shin, M. K., & Kim, Y. O. (2013). Phylogenetic investigations on ten genera of tintinnid ciliates (Ciliophora: Spirotrichea: Tintinnida), based on small subunit ribosomal RNA gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 60(2), 192–202. https://doi.org/10.1111/jeu.12023
JX10185 8.1	<i>Eutintinnus lususundae</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Xu, D., Sun, P., Warren, A., Noh, J. H., Choi, D. L., Shin, M. K., & Kim, Y. O. (2013). Phylogenetic investigations on ten genera of tintinnid ciliates (Ciliophora: Spirotrichea: Tintinnida), based on small subunit ribosomal RNA gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 60(2), 192–202. https://doi.org/10.1111/jeu.12023
JX10185 9.1	<i>Eutintinnus stramentus</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Xu, D., Sun, P., Warren, A., Noh, J. H., Choi, D. L., Shin, M. K., & Kim, Y. O. (2013). Phylogenetic investigations on ten genera of tintinnid ciliates (Ciliophora: Spirotrichea: Tintinnida), based on small subunit ribosomal RNA gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 60(2), 192–202. https://doi.org/10.1111/jeu.12023
JX10186 2.1	<i>Metacylis pithos</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Xu, D., Sun, P., Warren, A., Noh, J. H., Choi, D. L., Shin, M. K., & Kim, Y. O. (2013). Phylogenetic investigations on ten genera of tintinnid ciliates (Ciliophora: Spirotrichea: Tintinnida), based on small subunit ribosomal RNA gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 60(2), 192–202. https://doi.org/10.1111/jeu.12023
JX10186 3.1	<i>Protorhabdonella curta</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Xu, D., Sun, P., Warren, A., Noh, J. H., Choi, D. L., Shin, M. K., & Kim, Y. O. (2013). Phylogenetic investigations on ten genera of tintinnid ciliates (Ciliophora: Spirotrichea: Tintinnida), based on small subunit ribosomal RNA gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 60(2), 192–202. https://doi.org/10.1111/jeu.12023

JX10186 4.1	<i>Rhabdonella poculum</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Xu, D., Sun, P., Warren, A., Noh, J. H., Choi, D. L., Shin, M. K., & Kim, Y. O. (2013). Phylogenetic investigations on ten genera of tintinnid ciliates (Ciliophora: Spirotrichea: Tintinnida), based on small subunit ribosomal RNA gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 60(2), 192–202. https://doi.org/10.1111/jeu.12023
JX13911 7.1	<i>Paraurosomoida indiensis</i>	Spirotrichea	-	Terrestrial	Singh, J., & Kamra, K. (2013). <i>Paraurosomoida indiensis</i> gen. nov., sp. nov., an oxytrichid (Ciliophora, Hypotricha) from Kyongnosla Alpine Sanctuary, including note on non-oxytrichid Dorsomarginalia. <i>European journal of protistology</i> , 49(4), 600–610. https://doi.org/10.1016/j.ejop.2013.04.001
JX18574 3.1	<i>Euplotes dammamensis</i>	Spirotrichea	Euplotia	Marine/Brackish	Chen, X., Zhao, Y., Al-Farraj, S. A., Al-Quraishy, S. A., El-Serehy, H. A., Shao, C., & Al-Rasheid, K. A. S. (2013). Taxonomic Descriptions of Two Marine Ciliates, <i>Euplotes dammamensis</i> n. sp. and <i>Euplotes balteatus</i> (Dujardin, 1841) Kahl, 1932 (Ciliophora, Spirotrichea, Euplotida), Collected from the Arabian Gulf, Saudi Arabia. <i>Acta Protozoologica</i> , 52, 73–89. https://doi.org/10.4467/16890027AP.13.008.1087
JX20473 6.1	<i>Wilbertomorpha colpoda</i>	Karyorelictea	-	Marine/Brackish	Xu, Y., Li, J., Song, W., & Warren, A. (2013). Phylogeny and establishment of a new ciliate family, Wilbertomorphidae fam. nov. (Ciliophora, Karyorelictea), a highly specialized taxon represented by <i>Wilbertomorpha colpoda</i> gen. nov., spec. nov. <i>The Journal of Eukaryotic Microbiology</i> , 60(5), 480–489. https://doi.org/10.1111/jeu.12055
JX31036 5.1	<i>Antestrombidium agathae</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Liu, W., Yi, Z., Xu, D., Clamp, J. C., Li, J., Lin, X., & Song, W. (2015). Two New Genera of Planktonic Ciliates and Insights into the Evolution of the Family Strombidiidae (Protista, Ciliophora, Oligotrichia). <i>PLoS One</i> , 10(6), e0131726. https://doi.org/10.1371/journal.pone.0131726
JX31036 6.1	<i>Sinistrostrombidium cupiformum</i>	Spirotrichea	-	Marine/Brackish	Liu, W., Yi, Z., Xu, D., Clamp, J. C., Li, J., Lin, X., & Song, W. (2015). Two New Genera of Planktonic Ciliates and Insights into the Evolution of the Family Strombidiidae (Protista, Ciliophora, Oligotrichia). <i>PLoS One</i> , 10(6), e0131726. https://doi.org/10.1371/journal.pone.0131726
JX43713 6.1	<i>Euplotes quinquecarinatus</i>	Spirotrichea	Euplotia	Marine/Brackish	Guella, G., Callone, E., Mancini, I., Dini, F., & Di Giuseppe, G. (2012). Diterpenoids from Marine Ciliates: Chemical Polymorphism of <i>Euplotes rariseta</i> . <i>European Journal of Organic Chemistry</i> , 2012(27), 5208–5216. https://doi.org/10.1002/ejoc.201200559
JX46098 3.1	<i>Discocephalus pararotatorius</i>	Spirotrichea	Euplotia	Marine/Brackish	Jiang, J., Xing, Y., Miao, M., Shao, C., Warren, A., & Song, W. (2013). Two New Marine Ciliates, <i>Caryotricha rariseta</i> n. sp. and <i>Discocephalus pararotatorius</i> n. sp. (Ciliophora, Spirotrichea), with Phylogenetic Analyses Inferred from the Small Subunit rRNA Gene Sequences. <i>Journal of Eukaryotic Microbiology</i> , 60(4), 388–398. https://doi.org/10.1111/jeu.12046

JX46134 3.1	<i>Amphisiella pulchra</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Chen, X., Shao, C., Lin, X., Clamp, J. C., & Song, W. (2013). Morphology and molecular phylogeny of two new brackish-water species of <i>Amphisiella</i> (Ciliophora, Hypotrichia), with notes on morphogenesis. <i>European Journal of Protistology</i> , 49, 453–466. https://doi.org/10.1016/j.ejop.2012.11.002
JX46134 4.1	<i>Amphisiella candida</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Chen, X., Shao, C., Lin, X., Clamp, J. C., & Song, W. (2013). Morphology and molecular phylogeny of two new brackish-water species of <i>Amphisiella</i> (Ciliophora, Hypotrichia), with notes on morphogenesis. <i>European Journal of Protistology</i> , 49, 453–466. https://doi.org/10.1016/j.ejop.2012.11.002
JX56121 8.1	<i>Bromeliophrya quadristicha</i>	Oligohymenophorea	-	Freshwater	Foissner, W., & Stoeck, T. (2013). Morphology of <i>Bromeliophrya quadristicha</i> n. spec., an Inhabitant of Tank Bromeliads (Bromeliaceae), and Phylogeny of the Bromeliophryidae (Ciliophora, Tetrahymenida). <i>Journal of Eukaryotic Microbiology</i> , 60(3), 223-234. https://doi.org/10.1111/jeu.12020
JX88570 3.1	<i>Stylonychia ammermanni</i>	Spirotrichea	Hypotrichia	Freshwater	Singh, J., Kamra, K., & Sapra, G. R. (2013). Morphology, ontogenesis, and molecular phylogeny of an Indian population of <i>Cyrtohymena</i> (Cyrtohymenides) shii, including remarks on the subgenus. <i>European Journal of Protistology</i> , 49(2), 283–297. https://doi.org/10.1016/j.ejop.2012.08.009
JX88570 4.1	<i>Pattersoniella vitiphila</i>	Spirotrichea	Hypotrichia	Terrestrial	Berger, H. (1999). Monograph of the Oxytrichidae (Ciliophora, Hypotrichia). <i>Monographiae Biologicae</i> , 78, i-xii, 1-1080. doi: 10.1007/978-94-011-4637-1
JX89336 8.1	<i>Laurentiella strenua</i>	Spirotrichea	Hypotrichia	Freshwater	Berger, H. (1999). Monograph of the Oxytrichidae (Ciliophora, Hypotrichia). <i>Monographiae Biologicae</i> , 78, i-xii, 1-1080. doi: 10.1007/978-94-011-4637-1
JX89942 0.1	<i>Oxytricha longigranulosa</i>	Spirotrichea	Hypotrichia	Terrestrial	Berger, H. (1999). Monograph of the Oxytrichidae (Ciliophora, Hypotrichia). <i>Monographiae Biologicae</i> , 78, i-xii, 1-1080. doi: 10.1007/978-94-011-4637-1
JX91466 5.1	<i>Philasterides dicentrarchi</i>	Oligohymenophorea	Scuticociliata	Symbiosis	Iglesias, R., Paramá, A., Alvarez, M. F., Leiro, J., Fernández, J., & Sanmartín, M. L. (2001). <i>Philasterides dicentrarchi</i> (Ciliophora, Scuticociliatida) as the causative agent of scuticociliatosis in farmed turbot <i>Scophthalmus maximus</i> in Galicia (NW Spain). <i>Diseases of Aquatic Organisms</i> , 46, 47-55.
JX94627 6.1	<i>Steinia sphagnicola</i>	Spirotrichea	Hypotrichia	Freshwater	Berger, H. (1999). Monograph of the Oxytrichidae (Ciliophora, Hypotrichia). <i>Monographiae Biologicae</i> , 78, i-xii, 1-1080. doi: 10.1007/978-94-011-4637-1
KC13971 3.1	<i>Clevelandella constricta</i>	Armophorea	-	Symbiosis	Lynn, D. H., & Wright, A. D. (2013). Biodiversity and molecular phylogeny of Australian <i>Clevelandella</i> species (Class Armophorea, Order Clevelandellida, Family Clevelandellidae), intestinal endosymbiotic ciliates in the wood-feeding roach <i>Panesthia cribrata</i> Saussure, 1864. <i>The Journal of Eukaryotic Microbiology</i> , 60(4), 335–341. https://doi.org/10.1111/jeu.12037

KC13971 4.1	<i>Clevelandella nipponensis</i>	Armophorea	-	Symbiosis	Lynn, D. H., & Wright, A. D. (2013). Biodiversity and molecular phylogeny of Australian <i>Clevelandella</i> species (Class Armophorea, Order Clevelandellida, Family Clevelandellidae), intestinal endosymbiotic ciliates in the wood-feeding roach <i>Panesthia cribrata</i> Saussure, 1864. <i>The Journal of Eukaryotic Microbiology</i> , 60(4), 335–341. https://doi.org/10.1111/jeu.12037
KC13971 9.1	<i>Clevelandella panesthiae</i>	Armophorea	-	Symbiosis	Lynn, D. H., & Wright, A. D. (2013). Biodiversity and molecular phylogeny of Australian <i>Clevelandella</i> species (Class Armophorea, Order Clevelandellida, Family Clevelandellidae), intestinal endosymbiotic ciliates in the wood-feeding roach <i>Panesthia cribrata</i> Saussure, 1864. <i>The Journal of Eukaryotic Microbiology</i> , 60(4), 335–341. https://doi.org/10.1111/jeu.12037
KC15353 2.1	<i>Strongylidium orientale</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Chen, X., Miao, M., Ma, H., Shao, C., & Al-Rasheid, K. A. S. (2013). Morphology, morphogenesis and small-subunit rRNA gene sequence of the novel brackish-water ciliate <i>Strongylidium orientale</i> sp. nov. (Ciliophora, Hypotrichia). <i>International Journal of Systematic and Evolutionary Microbiology</i> , 63, 1155–1164. https://doi.org/10.1099/ijs.0.048157-0
KC19324 0.1	<i>Sterkiella histriomuscorum</i>	Spirotrichea	Hypotrichia	Freshwater	Foissner, W., & Berger, H. (1999). Identification and Ontogenesis of the <i>nomen nudum</i> Hypotrichs (Protozoa: Ciliophora) <i>Oxytricha nova</i> (= <i>Sterkiella nova</i> sp. n.) and <i>O. trifallax</i> (= <i>S. histriomuscorum</i>). <i>Acta Protozoologica</i> , 38, 215–248.
KC34995 0.1	<i>Pinacocoleps tessellatus</i>	Armophorea	-	Marine/Brackish	Lu, B., Huang, J., & Chen, X. (2013). The morphology and SSU rRNA gene sequence analysis of a poorly-known brackish water ciliate, <i>Pinacocoleps tessellatus</i> (Kahl, 1930) (Ciliophora, Colepidae) from Hangzhou Bay, China. <i>Zootaxa</i> , 3637, 123–130. https://doi.org/10.11646/zootaxa.3637.2.3
KC41183 2.1	<i>Kleinstyla dorsicirrata</i>	Spirotrichea	Stichotrichia	Terrestrial	Singh, J., & Kamra, K. (2014). Molecular phylogeny of an Indian population of <i>Kleinstyla dorsicirrata</i> (Foissner, 1982) Foissner et al., 2002. comb. nov. (Hypotrichia, Oxytrichidae): an oxytrichid with incomplete dorsal kinety fragmentation. <i>The Journal of Eukaryotic Microbiology</i> , 61(6), 630–636. https://doi.org/10.1111/jeu.12142
KC41488 5.1	<i>Rigidohymena candens</i>	Spirotrichea	Stichotrichia	Terrestrial	Chen, X., Yan, Y., Hu, X., Zhu, M., Ma, H., & Warren, A. (2013). Morphology and morphogenesis of a soil ciliate, <i>Rigidohymena candens</i> (Kahl, 1932) Berger, 2011 (Ciliophora, Hypotrichia, Oxytrichidae), with notes on its molecular phylogeny based on small-subunit rDNA sequence data. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 63, 1912–1921. https://doi.org/10.1099/ijs.0.048611-0
KC43093 4.1	<i>Notohymena apoaustralis</i>	Spirotrichea	Stichotrichia	Freshwater	Lv, Z., Chen, L., Chen, L., Shao, C., Miao, M., & Warren, A. (2013). Morphogenesis and molecular phylogeny of a new freshwater ciliate, <i>Notohymena apoaustralis</i> n. sp. (Ciliophora, Oxytrichidae). <i>The Journal of Eukaryotic Microbiology</i> , 60(5), 455–466. https://doi.org/10.1111/jeu.12053

KC46998 5.1	<i>Loxophyllum meridionale</i>	Litostomatea	Haptoria	Marine/Brackish	Wu, L., Chen, R., Yi, Z., Li, J., Warren, A., & Lin, X. (2013). Morphology and Phylogeny of Three New <i>Loxophyllum</i> Species (Ciliophora, Pleurostomatida) from Mangrove Wetlands of Southern China by Wu et al". <i>The Journal of Eukaryotic Microbiology</i> , 64(6), 904. https://doi.org/10.1111/jeu.12437
KC47618 0.1	<i>Loxophyllum planum</i>	Litostomatea	Haptoria	Marine/Brackish	Wu, L., Chen, R., Yi, Z., Li, J., Warren, A., & Lin, X. (2013). Morphology and Phylogeny of Three New <i>Loxophyllum</i> Species (Ciliophora, Pleurostomatida) from Mangrove Wetlands of Southern China by Wu et al". <i>The Journal of Eukaryotic Microbiology</i> , 64(6), 904. https://doi.org/10.1111/jeu.12437
KC47618 1.1	<i>Loxophyllum salinum</i>	Litostomatea	Haptoria	Marine/Brackish	Wu, L., Chen, R., Yi, Z., Li, J., Warren, A., & Lin, X. (2013). Morphology and Phylogeny of Three New <i>Loxophyllum</i> Species (Ciliophora, Pleurostomatida) from Mangrove Wetlands of Southern China by Wu et al". <i>The Journal of Eukaryotic Microbiology</i> , 64(6), 904. https://doi.org/10.1111/jeu.12437
KC49357 0.1	<i>Loxophyllum perihoplophorum</i>	Litostomatea	Haptoria	Marine/Brackish	Wu, L., Chen, R., Yi, Z., Li, J., Warren, A., & Lin, X. (2014). The Morphology of Three <i>Loxophyllum</i> Species (Ciliophora, Pleurostomatida) from Southern China, <i>L. lembum</i> sp. n., <i>L. vesiculosum</i> sp. n. and <i>L. perihoplophorum</i> Buddenbrock, 1920, with Notes on the Molecular Phylogeny of <i>Loxophyllum</i> . <i>The Journal of Eukaryotic Microbiology</i> , 64(6), 905. https://doi.org/10.1111/jeu.12438
KC54293 4.1	<i>Kovalevaia sulcata</i>	Karyorelictea	-	Marine/Brackish	Yan, Y., Xu, Y., Yi, Z., & Warren, A. (2013). Redescriptions of three trachelocercid ciliates (Protista, Ciliophora, Karyorelictea), with notes on their phylogeny based on small subunit rRNA gene sequences. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 63(Pt 9), 3506–3514. https://doi.org/10.1099/ijs.0.053959-0
KC54293 5.1	<i>Trachelocerca sagitta</i>	Karyorelictea	-	Marine/Brackish	Yan, Y., Xu, Y., Yi, Z., & Warren, A. (2013). Redescriptions of three trachelocercid ciliates (Protista, Ciliophora, Karyorelictea), with notes on their phylogeny based on small subunit rRNA gene sequences. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 63(Pt 9), 3506–3514. https://doi.org/10.1099/ijs.0.053959-0
KC63182 6.1	<i>Bakuella subtropica</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Chen, X., Hu, X., Lin, X., Al-Rasheid, K. A. S., Ma, H., & Miao, M. (2013). Morphology, ontogeny and molecular phylogeny of a new brackish water ciliate <i>Bakuella subtropica</i> sp. n. (Ciliophora, Hypotricha) from southern China. <i>European Journal of Protistology</i> , 49, 611–622. https://doi.org/10.1016/j.ejop.2013.05.001
KC75348 2.1	<i>Agnathodysteria littoralis</i>	Phyllopharyng ea	Phyllopharyng gia	Marine/Brackish	Chen, X., Pan, H., Huang, J., Warren, A., Al-Farraj, S.A., & Gao, S. (2015). New considerations on the phylogeny of cyrtophorian ciliates (Protozoa, Ciliophora): expanded sampling to understand their evolutionary relationships. <i>Zoologica Scripta</i> , 45, 334–348. https://doi.org/10.1111/zsc.12150

KC75348 3.1	<i>Brooklynella sinensis</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Chen, X., Pan, H., Huang, J., Warren, A., Al-Farraj, S.A., & Gao, S. (2015). New considerations on the phylogeny of cyrtophorian ciliates (Protozoa, Ciliophora): expanded sampling to understand their evolutionary relationships. <i>Zoologica Scripta</i> , 45, 334– 348. https://doi.org/10.1111/zsc.12150
KC75348 4.1	<i>Odontochlamys biciliata</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Chen, X., Pan, H., Huang, J., Warren, A., Al-Farraj, S.A., & Gao, S. (2015). New considerations on the phylogeny of cyrtophorian ciliates (Protozoa, Ciliophora): expanded sampling to understand their evolutionary relationships. <i>Zoologica Scripta</i> , 45, 334– 348. https://doi.org/10.1111/zsc.12150
KC75348 6.1	<i>Chlamydonella irregularis</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Chen, X., Pan, H., Huang, J., Warren, A., Al-Farraj, S.A., & Gao, S. (2015). New considerations on the phylogeny of cyrtophorian ciliates (Protozoa, Ciliophora): expanded sampling to understand their evolutionary relationships. <i>Zoologica Scripta</i> , 45, 334– 348. https://doi.org/10.1111/zsc.12150
KC75348 8.1	<i>Dysteria cristata</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Chen, X., Pan, H., Huang, J., Warren, A., Al-Farraj, S.A., & Gao, S. (2015). New considerations on the phylogeny of cyrtophorian ciliates (Protozoa, Ciliophora): expanded sampling to understand their evolutionary relationships. <i>Zoologica Scripta</i> , 45, 334– 348. https://doi.org/10.1111/zsc.12150
KC75348 9.1	<i>Coeloperix sleighi</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Chen, X., Pan, H., Huang, J., Warren, A., Al-Farraj, S.A., & Gao, S. (2015). New considerations on the phylogeny of cyrtophorian ciliates (Protozoa, Ciliophora): expanded sampling to understand their evolutionary relationships. <i>Zoologica Scripta</i> , 45, 334– 348. https://doi.org/10.1111/zsc.12150
KC75349 0.1	<i>Dysteria lanceolata</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Chen, X., Pan, H., Huang, J., Warren, A., Al-Farraj, S.A., & Gao, S. (2015). New considerations on the phylogeny of cyrtophorian ciliates (Protozoa, Ciliophora): expanded sampling to understand their evolutionary relationships. <i>Zoologica Scripta</i> , 45, 334– 348. https://doi.org/10.1111/zsc.12150
KC75349 1.1	<i>Dysteria compressa</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Chen, X., Pan, H., Huang, J., Warren, A., Al-Farraj, S.A., & Gao, S. (2015). New considerations on the phylogeny of cyrtophorian ciliates (Protozoa, Ciliophora): expanded sampling to understand their evolutionary relationships. <i>Zoologica Scripta</i> , 45, 334– 348. https://doi.org/10.1111/zsc.12150
KC75349 9.1	<i>Spirodysteria kahl</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Chen, X., Pan, H., Huang, J., Warren, A., Al-Farraj, S.A., & Gao, S. (2015). New considerations on the phylogeny of cyrtophorian ciliates (Protozoa, Ciliophora): expanded sampling to understand their evolutionary relationships. <i>Zoologica Scripta</i> , 45, 334– 348. https://doi.org/10.1111/zsc.12150
KC77134 1	<i>Askenasia sp</i>	Plagiopylea	-	Marine/Brac kish	Liu, A., Yi, Z., Lin, X., Hu, X., Al-Farraj, S. A., & Al-Rasheid, K. A. S. (2015). Molecular phylogenetic lineage of Plagiopogon and Askenasia (Protozoa, Ciliophora) revealed by their gene sequences. <i>Journal of Ocean University of China</i> , 14, 724–730. https://doi.org/10.1007/s11802-015-2559-3

KC77134 2.1	<i>Plagiopogon loricatus</i>	Prostomeatea	-	Marine/Brackish	Liu, A., Yi, Z., Lin, X., Hu, X., Al-Faraj, S. A., & Al-Rasheid, K. A. S. (2015). Molecular phylogenetic lineage of <i>Plagiopogon</i> and <i>Askenasia</i> (Protozoa, Ciliophora) revealed by their gene sequences. <i>Journal of Ocean University of China</i> , 14, 724–730. https://doi.org/10.1007/s11802-015-2559-3
KC83294 9.1	<i>Nassula labiata</i>	Nassophorea	Nassulida	Marine/Brackish	Zhang, Q., Yi, Z., Fan, X., Warren, A., Gong, J., & Song, W. (2014). Further insights into the phylogeny of two ciliate classes Nassophorea and Prostomeatea (Protista, Ciliophora). <i>Molecular Phylogenetics & Evolution</i> , 70, 162–170. https://doi.org/10.1016/j.ympev.2013.09.015
KC83295 0.1	<i>Plagiocampa sp</i>	Plagiopylea	-	Marine/Brackish	Zhang, Q., Yi, Z., Fan, X., Warren, A., Gong, J., & Song, W. (2014). Further insights into the phylogeny of two ciliate classes Nassophorea and Prostomeatea (Protista, Ciliophora). <i>Molecular Phylogenetics & Evolution</i> , 70, 162–170. https://doi.org/10.1016/j.ympev.2013.09.015
KC83295 4.1	<i>Placus salinus</i>	Prostomeatea	-	Marine/Brackish	Zhang, Q., Yi, Z., Fan, X., Warren, A., Gong, J., & Song, W. (2014). Further insights into the phylogeny of two ciliate classes Nassophorea and Prostomeatea (Protista, Ciliophora). <i>Molecular Phylogenetics & Evolution</i> , 70, 162–170. https://doi.org/10.1016/j.ympev.2013.09.015
KC83295 5.1	<i>Apocolpodidium etoschense</i>	Nassophorea	-	Terrestrial	Zhang, Q., Yi, Z., Fan, X., Warren, A., Gong, J., & Song, W. (2014). Further insights into the phylogeny of two ciliate classes Nassophorea and Prostomeatea (Protista, Ciliophora). <i>Molecular Phylogenetics & Evolution</i> , 70, 162–170. https://doi.org/10.1016/j.ympev.2013.09.015
KC83295 6.1	<i>Paranassula sp</i>	Oligohymenophorea	Peniculia	Marine/Brackish	Zhang, Q., Yi, Z., Fan, X., Warren, A., Gong, J., & Song, W. (2014). Further insights into the phylogeny of two ciliate classes Nassophorea and Prostomeatea (Protista, Ciliophora). <i>Molecular Phylogenetics & Evolution</i> , 70, 162–170. https://doi.org/10.1016/j.ympev.2013.09.015
KC89664 8.1	<i>Arcuseries petzi</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Kim, K.-S., Jung, J.-H. & Min, G.-S. (2013). New Record of Two Marine Ciliates (Ciliophora: Spirotrichea) in South Korea. <i>Animal Systematics, Evolutionary & Diversity</i> , 29(2), 144-151. https://doi.org/10.5635/ASED.2013.29.2.144
KC89664 9.1	<i>Ponturostyla enigmatica</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Kim, K.-S., Jung, J.-H. & Min, G.-S. (2013). New Record of Two Marine Ciliates (Ciliophora: Spirotrichea) in South Korea. <i>Animal Systematics, Evolutionary & Diversity</i> , 29(2), 144-151. https://doi.org/10.5635/ASED.2013.29.2.144
KC99109 8.1	<i>Schmidingerothrix salinarum</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Foissner, W., Filker, S., & Stoeck, T. (2014). <i>Schmidingerothrix salinarum</i> nov. spec. is the Molecular Sister of the Large Oxytrichid Clade (Ciliophora, Hypotrichia). <i>Journal of Eukaryotic Microbiology</i> , 61(1), 61-74. https://doi.org/10.1111/jeu.12087

KF18465 5.1	<i>Paraparentocirrus sibillinensis</i>	Spirotrichea	-	Terrestrial	Kumar, S., Bharti, D., Marinsalti, S., Insom, E., & Terza, A. L. (2014). Morphology, Morphogenesis, and Molecular Phylogeny of <i>Paraparentocirrus sibillinensis</i> n. gen., n. sp., a "Stylonychine Oxytrichidae" (Ciliophora, Hypotrichida) Without Transverse Cirri. <i>Journal of Eukaryotic Microbiology</i> , 61, 247-259. https://doi.org/10.1111/jeu.12103
KF30639 3.1	<i>Anteholosticha pulchra</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Zhao, X., Gao, S., Fan, Y., Strueder-Kypke, M., & Huang, J. (2015). Phylogenetic framework of the systematically confused <i>Anteholosticha-Holosticha</i> complex (Ciliophora, Hypotrichia) based on multigene analysis. <i>Molecular Phylogenetics & Evolution</i> , 91, 238–247. https://doi.org/10.1016/j.ympev.2015.05.021
KF30639 6.1	<i>Holosticha diademata</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Zhao, X., Gao, S., Fan, Y., Strueder-Kypke, M., & Huang, J. (2015). Phylogenetic framework of the systematically confused <i>Anteholosticha-Holosticha</i> complex (Ciliophora, Hypotrichia) based on multigene analysis. <i>Molecular Phylogenetics & Evolution</i> , 91, 238–247. https://doi.org/10.1016/j.ympev.2015.05.021
KF30639 7.1	<i>Anteholosticha gracilis</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Zhao, X., Gao, S., Fan, Y., Strueder-Kypke, M., & Huang, J. (2015). Phylogenetic framework of the systematically confused <i>Anteholosticha-Holosticha</i> complex (Ciliophora, Hypotrichia) based on multigene analysis. <i>Molecular Phylogenetics & Evolution</i> , 91, 238–247. https://doi.org/10.1016/j.ympev.2015.05.021
KF41146 0.1	<i>Urospinula succisa</i>	Spirotrichea	Stichotrichia	Terrestrial	Heber, D., Stoeck, T., & Foissner, W. (2014). Morphology and Ontogenesis of <i>Psilotrichides hawaiiensis</i> nov. gen., nov. spec. and Molecular Phylogeny of the Psilotrichidae (Ciliophora, Hypotrichia). <i>Journal of Eukaryotic Microbiology</i> , 61(3), 260-277. https://doi.org/10.1111/jeu.12104
KF47102 4.1	<i>Pseudouroleptus jejuensis</i>	Spirotrichea	Stichotrichia	Terrestrial	Jung, J.-H., Park, K.-M., & Min, G.-S. (2014). Morphology and Molecular Phylogeny of <i>Pseudouroleptus jejuensis</i> nov. spec., a New Soil Ciliate (Ciliophora, Spirotrichea) from South Korea. <i>Acta Protozoologica</i> , 53, 195-206.
KF51651 1.1	<i>Fusiforma themisticola</i>	Oligohymenophorea	-	Symbiosis	Chantangsi, C., Lynn, D. H., Rueckert, S., Prokopowicz, A. J., Panha, S., & Leander, B. S. (2013). <i>Fusiforma themisticola</i> n. gen., n. sp., a New Genus and Species of Apostome Ciliate Infecting the Hyperiid Amphipod <i>Themisto libellula</i> in the Canadian Beaufort Sea (Arctic Ocean), and Establishment of the Pseudocolliniidae (Ciliophora, Apostomatia). <i>Protist</i> , 164, 793-810. https://doi.org/10.1016/j.protis.2013.09.001
KF56968 4.1	<i>Bryophryoides ocellatus</i>	Colpodea	-	Terrestrial	Bourland, W. A., Wendell, L., Hampikiana, G., & Vdacy, P. (2014). Morphology and phylogeny of <i>Bryophryoides ocellatus</i> n. g., n. sp. (Ciliophora, Colpodea) from in situ soil percolates of Idaho, U.S.A. <i>European Journal of Protistology</i> , 50, 47–67. http://dx.doi.org/10.1016/j.ejop.2013.09.001

KF59159 7.1	<i>Pseudouroleptus caudatus</i>	Spirotrichea	Stichotrichia	Terrestrial	Chen, L., Zhao, X., Ma, H., Warren, A., Shao, C., & Huang, J. (2015). Morphology, morphogenesis and molecular phylogeny of a soil ciliate, <i>Pseudouroleptus caudatus</i> Hemberger, 1985 (Ciliophora, Hypotricha), from Lhalu Wetland, Tibet. <i>European Journal of Protistology</i> , 51, 1–14 http://dx.doi.org/10.1016/j.ejop.2014.09.001
KF60708 3.1	<i>Metopus fuscus</i>	Armophorea	-	Freshwater	Bourland, W. A., Wendell, L., Hampikiana, G., & Vdacny, P. (2014). Morphology and phylogeny of <i>Bryophryoides ocellatus</i> n. g., n. sp. (Ciliophora, Colpodea) from in situ soil percolates of Idaho, U.S.A. <i>European Journal of Protistology</i> , 50, 47–67. http://dx.doi.org/10.1016/j.ejop.2013.09.001
KF60708 6.1	<i>Atopospira violacea</i>	Armophorea	-	Freshwater	Bourland, W. A., & Wendel, L. (2014). Redescription of <i>Atopospira galeata</i> (Kahl, 1927) nov. comb. and <i>A. violacea</i> (Kahl, 1926) nov. comb. with redefinition of <i>Atopospira</i> Jankowski, 1964 nov. stat. and <i>Brachonella</i> Jankowski, 1964 (Ciliophora, Armophorida). <i>European Journal of Protistology</i> , 50 (4), 356-372. https://doi.org/10.1016/j.ejop.2014.05.004
KF60708 9.1	<i>Planometopus contractus</i>	Armophorea	-	Freshwater	Bourland, W. A., Wendell, L., Hampikiana, G., & Vdacny, P. (2014). Morphology and phylogeny of <i>Bryophryoides ocellatus</i> n. g., n. sp. (Ciliophora, Colpodea) from in situ soil percolates of Idaho, U.S.A. <i>European Journal of Protistology</i> , 50, 47–67. http://dx.doi.org/10.1016/j.ejop.2013.09.001
KF72563 4.1	<i>Dysteria nabia</i>	Phyllopharyngea	Cyrtophoria	Marine/Brackish	Park, M.-H., & Min, G.-S. (2014). A New Marine Cyrtophorid Ciliate, <i>Dysteria nabia</i> nov. spec. (Ciliophora: Phyllopharyngea: Cyrtophorida: Dysteriidae), from South Korea. <i>Acta Protozoologica</i> , 53(3), 257-268. https://doi.org/10.4467/16890027AP.14.023.1998
KF73031 4.1	<i>Tetrakeronopsis silvanetoi</i>	Spirotrichea	-	Marine/Brackish	Paiva, T., de Albuquerque, A. F., Borges, B., & Harada, M. L. (2014). Description and phylogeny of <i>Tetrakeronopsis silvanetoi</i> gen. nov., sp. nov. (Hypotricha, Pseudokeronopsidae), a new benthic marine ciliate from Brazil. <i>PloS One</i> , 9(2), e88954. https://doi.org/10.1371/journal.pone.0088954
KF73375 3.1	<i>Fuscheria uluruensis</i>	Litostomatea	Haptoria	Terrestrial	Vďačný, P., Breiner, H. W., Yashchenko, V., Dunthorn, M., Stoeck, T., & Foissner, W. (2014). The chaos prevails: molecular phylogeny of the Haptoria (Ciliophora, Litostomatea). <i>Protist</i> , 165(1), 93–111. https://doi.org/10.1016/j.protis.2013.11.001
KF73375 5.1	<i>Cultellothrix coemeterii</i>	Litostomatea	Haptoria	Terrestrial	Vďačný, P., Breiner, H. W., Yashchenko, V., Dunthorn, M., Stoeck, T., & Foissner, W. (2014). The chaos prevails: molecular phylogeny of the Haptoria (Ciliophora, Litostomatea). <i>Protist</i> , 165(1), 93–111. https://doi.org/10.1016/j.protis.2013.11.001
KF73375 6.1	<i>Spathidium foissneri</i>	Litostomatea	Haptoria	Terrestrial	Vďačný, P., Breiner, H. W., Yashchenko, V., Dunthorn, M., Stoeck, T., & Foissner, W. (2014). The chaos prevails: molecular phylogeny of the Haptoria (Ciliophora, Litostomatea). <i>Protist</i> , 165(1), 93–111. https://doi.org/10.1016/j.protis.2013.11.001
KF73375 7.1	<i>Spathidium rectitoratum</i>	Litostomatea	Haptoria	Terrestrial	Vďačný, P., Breiner, H. W., Yashchenko, V., Dunthorn, M., Stoeck, T., & Foissner, W. (2014). The chaos prevails: molecular phylogeny of the Haptoria (Ciliophora, Litostomatea). <i>Protist</i> , 165(1), 93–111. https://doi.org/10.1016/j.protis.2013.11.001

KF73375 8.1	<i>Acaryophrya sp</i>	Litostomatea	-	Terrestrial	Vďačný, P., Breiner, H. W., Yashchenko, V., Dunthorn, M., Stoeck, T., & Foissner, W. (2014). The chaos prevails: molecular phylogeny of the Haptoria (Ciliophora, Litostomatea). <i>Protist</i> , 165(1), 93–111. https://doi.org/10.1016/j.protis.2013.11.001
KF73497 9.1	<i>Uroleptus longicaudatus</i>	Spirotrichea	Stichotrichia	Freshwater	Chen, L., v, Z., Shao, C., Al-Farraj, S. A., Song, W., & Berger, H. (2016). Morphology, Cell Division, and Phylogeny of <i>Uroleptus longicaudatus</i> (Ciliophora, Hypotricha), a Species of the <i>Uroleptus limnetis</i> Complex. <i>International Society of Protistologists Journal of Eukaryotic Microbiology</i> , 63, 349–362. https://doi.org/10.1111/jeu.12284
KF80644 3.1	<i>Anteholosticha paramanca</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Fan, Y., Pan, Y., Huang, J., Lin, X., Hu, X., & Warren, A. (2014). Molecular Phylogeny and Taxonomy of Two Novel Brackish Water Hypotrich Ciliates, with the Establishment of a New Genus, <i>Antiokeronopsis</i> gen. n. (Ciliophora, Hypotrichia). <i>Journal of Eukaryotic Microbiology</i> , 0, 1-14. https://doi.org/10.1111/jeu.12125
KF80644 4.1	<i>Antiokeronopsis flava</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Fan, Y., Pan, Y., Huang, J., Lin, X., Hu, X., & Warren, A. (2014). Molecular Phylogeny and Taxonomy of Two Novel Brackish Water Hypotrich Ciliates, with the Establishment of a New Genus, <i>Antiokeronopsis</i> gen. n. (Ciliophora, Hypotrichia). <i>Journal of Eukaryotic Microbiology</i> , 0, 1-14. https://doi.org/10.1111/jeu.12125
KF87128 2.1	<i>Amphileptus dragescoi</i>	Litostomatea	Haptoria	Marine/Brackish	Pan, H., Li, L., Lin, X., Li, J., Al-Farraj, S. A., & Al-Rasheid, K. A. (2014). Morphology of three species of <i>Amphileptus</i> (Protozoa, Ciliophora, Pleurostomatida) from the South China Sea, with note on phylogeny of <i>A. dragescoi</i> sp. n. <i>The Journal of Eukaryotic Microbiology</i> , 61(6), 644–654. https://doi.org/10.1111/jeu.12146
KF88734 6.1	<i>Euplotes daidaleos</i>	Spirotrichea	Euplotia	Freshwater	Achilles-Day, U. E. M., Proschold, T., & Day, J. G. (2008). Phylogenetic position of the freshwater ciliate <i>Euplotes daidaleos</i> within the family of Euplotidae, obtained from small subunit rDNA gene sequence. <i>Denisia</i> , 23, 411-416.
KF95141 8.1	<i>Urosoma karinae</i>	Spirotrichea	Stichotrichia	Terrestrial	Shao, C., Chen, L., Pan, Y., Warren, A., & Miao, M. (2014). Morphology and phylogenetic position of the oxytrichid ciliates, <i>Urosoma salmastra</i> (Dragesco and Dragesco-Kernéis, 1986) Berger, 1999 and <i>U. karinae sinense</i> nov. spec. (Ciliophora, Hypotrichia). <i>European Journal of Protistology</i> , 50(5), 593–605. https://doi.org/10.1016/j.ejop.2014.08.004
KJ00028 5.1	<i>Apholosticha sinica</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Hu, X., Fan, Y., & Warren, A. (2015). New record of <i>Apholosticha sinica</i> (Ciliophora, Urostylida) from the UK: morphology, 18S rRNA gene phylogeny and notes on morphogenesis. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 65, 2549-2561. https://doi.org/10.1099/ijs.0.000301

KJ00053 5.1	<i>Pleurotricha curdsi</i>	Spirotrichea	Hypotrichia	Freshwater	Xu, Y., Li, L., Fan, X., Pan, G., Gu, F., & Al-Farraj, S. A. (2015). Systematic Analyses of the Genus <i>Architricha</i> and <i>Pleurotricha curdsi</i> (Ciliophora, Oxytrichidae), with Redescriptions of Their Morphology. <i>Acta Protozoologica</i> , 54, 183-193. https://doi.org/10.4467/16890027AP.15.015.3212
KJ00053 6.1	<i>Architricha indica</i>	Spirotrichea	Hypotrichia	Freshwater	Xu, Y., Li, L., Fan, X., Pan, G., Gu, F., & Al-Farraj, S. A. (2015). Systematic Analyses of the Genus <i>Architricha</i> and <i>Pleurotricha curdsi</i> (Ciliophora, Oxytrichidae), with Redescriptions of Their Morphology. <i>Acta Protozoologica</i> , 54, 183-193. https://doi.org/10.4467/16890027AP.15.015.3212
KJ08120 0.1	<i>Oxytricha paraganulifera</i>	Spirotrichea	Hypotrichia	Terrestrial	Shao, C., Lv, Z., Pan, Y., Al-Rasheid, K. A., & Yi, Z. Z. (2014). Morphology and phylogenetic analysis of two oxytrichid soil ciliates from China, <i>Oxytricha paraganulifera</i> n. sp. and <i>Oxytricha granulifera</i> Foissner and Adam, 1983 (Protista, Ciliophora, Hypotrichia). <i>International Journal of Systematic and Evolutionary Microbiology</i> , 64, 3016–3027. https://doi.org/10.1099/ijs.0.062281-0
KJ12472 4.1	<i>Balantidium polyvacuolum</i>	Litostomatea	Trichostomatia	Symbiosis	Li, M., Ponce-Gordo, F., Grim, J. N., Wang, C., & Nilsen, F. (2014). New insights into the molecular phylogeny of <i>Balantidium</i> (Ciliophora, Vetuliferida) based on the analysis of new sequences of species from fish hosts. <i>Parasitology Research</i> , 113(12), 4327–4333. https://doi.org/10.1007/s00436-014-4195-z
KJ43410 5.1	<i>Euplotes petzi</i>	Spirotrichea	Euplotia	Marine/Brackish	Di Giuseppe, G., Erra, F., Frontini, F. P., Dini, F., Vallesi, A., & Luporini, P. (2014). Improved description of the bipolar ciliate, <i>Euplotes petzi</i> , and definition of its basal position in the <i>Euplotes</i> phylogenetic tree. <i>European Journal of Protistology</i> , 50, 402–411. https://doi.org/10.1016/j.ejop.2014.05.001
KJ45245 8.1	<i>Chilodonella acuta</i>	Phyllopharyngia	Phyllopharyngia	Terrestrial	Fan, X., Ma, R., Al-Farraj, S. A., & Gu, F. (2014). Morphological and molecular characterization of <i>Parafurgasonia zhangii</i> spec. nov. and <i>Chilodonella acuta</i> Kahl, 1931 (Protozoa, Ciliophora), from a soil habitat of Saudi Arabia. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 64, 2385–2394. https://doi.org/10.1099/ijs.0.062026-0
KJ50919 6.1	<i>Bistichella cystiformans</i>	Spirotrichea	-	Terrestrial	Fan, Y., Hu, X., Gao, F., Al-Farraj, S. A., & Al-Rasheid, K. A. S. (2014). Morphology, ontogenetic features and SSU rRNA gene-based phylogeny of a soil ciliate, <i>Bistichella cystiformans</i> spec. nov. (Protista, Ciliophora, Stichotrichia). <i>International Journal of Systematic and Evolutionary Microbiology</i> , 64, 4049–4060. https://doi.org/10.1099/ijs.0.066381-0
KJ50919 7.1	<i>Chilodonella parauncinata</i>	Phyllopharyngia	Phyllopharyngia	Freshwater	Qu, Z., Pan, H., Hu, X., Li, J., Al-Farraj, S. A., Al-Rasheid, K. A., & Yi, Z. (2015). Morphology and Molecular Phylogeny of Three Cyrtophorid Ciliates (Protozoa, Ciliophora) from China, Including Two New Species, <i>Chilodonella parauncinata</i> sp. n. and <i>Chlamydonella irregularis</i> sp. n. <i>The Journal of eukaryotic microbiology</i> , 62(3), 267–279. https://doi.org/10.1111/jeu.12175

KJ50919 8.1	<i>Chlamydonella derouxi</i>	Phyllopharyngea	Cyrtophoria	Marine/Brackish	Qu, Z., Pan, H., Hu, X., Li, J., Al-Farraj, S. A., Al-Rasheid, K. A. S., & Yi, Z. (2015). Morphology and Molecular Phylogeny of Three Cyrtophorid Ciliates (Protozoa, Ciliophora) from China, Including Two New Species, <i>Chilodonella parauncinata</i> sp. n. and <i>Chlamydonella irregularis</i> sp. n. <i>Journal of Eukaryotic Microbiology</i> , 62, 267–279. https://doi.org/10.1111/jeu.12175
KJ52490 9.1	<i>Loxodes vorax</i>	Karyorelictea	-	Freshwater	Xu, Y., Pan, H., Miao, M., Hu, X., Al-Farraj, S. A., Al-Rasheid, K. A., & Song, W. (2015). Morphology and phylogeny of two species of <i>Loxodes</i> (Ciliophora, Karyorelictea), with description of a new subspecies, <i>Loxodes striatus orientalis</i> subsp. n. <i>The Journal of Eukaryotic Microbiology</i> , 62(2), 206–216. https://doi.org/10.1111/jeu.12162
KJ52491 0.1	<i>Loxodes orientalis</i>	Karyorelictea	-	Freshwater	Xu, Y., Pan, H., Miao, M., Hu, X., Al-Farraj, S. A., Al-Rasheid, K. A., & Song, W. (2015). Morphology and phylogeny of two species of <i>Loxodes</i> (Ciliophora, Karyorelictea), with description of a new subspecies, <i>Loxodes striatus orientalis</i> subsp. n. <i>The Journal of Eukaryotic Microbiology</i> , 62(2), 206–216. https://doi.org/10.1111/jeu.12162
KJ52491 1.1	<i>Euplotes amiet</i>	Spirotrichea	Euplotia	Freshwater	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
KJ53458 2.1	<i>Cyrtostrombidium longisomum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Tsai, S. F., Chen, W. T., & Chiang, K. P. (2015). Phylogenetic position of the genus <i>Cyrtostrombidium</i> , with a description of <i>Cyrtostrombidium paralongisomum</i> nov. spec. and a redescription of <i>Cyrtostrombidium longisomum</i> Lynn & Gilron, 1993 (Protozoa, Ciliophora) based on live observation, protargol impregnation, and 18S rDNA sequences. <i>The Journal of Eukaryotic Microbiology</i> , 62(2), 239–248. https://doi.org/10.1111/jeu.12173
KJ53458 3.1	<i>Cyrtostrombidium paralongisomum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Tsai, S. F., Chen, W. T., & Chiang, K. P. (2015). Phylogenetic position of the genus <i>Cyrtostrombidium</i> , with a description of <i>Cyrtostrombidium paralongisomum</i> nov. spec. and a redescription of <i>Cyrtostrombidium longisomum</i> Lynn & Gilron, 1993 (Protozoa, Ciliophora) based on live observation, protargol impregnation, and 18S rDNA sequences. <i>The Journal of Eukaryotic Microbiology</i> , 62(2), 239–248. https://doi.org/10.1111/jeu.12173
KJ56760 7.1	<i>Tokophrya huangmeiensis</i>	Phyllopharyngea	Suctorina	Freshwater	Tahir, U. B., Deng, Q., Li, S., Liu, Y., Wang, Z., & Gu, Z. (2017). First record of a new epibionts suctorian ciliate <i>Tokophrya huangmeiensis</i> sp.n. (Ciliophora, Phyllopharyngea) from redclaw crayfish <i>Cherax quadricarinatus</i> von Martens 1868. <i>Zootaxa</i> , 4269(2), 287–295. https://doi.org/10.11646/zootaxa.4269.2.7
KJ60791 4.1	<i>Colpoda steinii</i>	Colpodea	-	Terrestrial	Shatilovich, A., Stoupin, D., & Rivkina, E. (2015). Ciliates from ancient permafrost: Assessment of cold resistance of the resting cysts. <i>European Journal of Protistology</i> , 51(3), 230–240. https://doi.org/10.1016/j.ejop.2015.04.001

KJ60791 8.1	<i>Colpoda inflata</i>	Colpodea	-	Terrestrial	Shatilovich, A., Stoupin, D., & Rivkina, E. (2015). Ciliates from ancient permafrost: Assessment of cold resistance of the resting cysts. <i>European Journal of Protistology</i> , 51(3), 230–240. https://doi.org/10.1016/j.ejop.2015.04.001
KJ60903 5.1	<i>Prototrachelocerca fasciolata</i>	Karyorelictea	-	Marine/Brackish	Yan, Y., Gao, F., Xu, Y., Al-Rasheid, K. A., & Song, W. (2015). Morphology and phylogeny of three trachelocercid ciliates, with description of a new species, <i>Trachelocerca orientalis</i> spec. nov. (Ciliophora, Karyorelictea). <i>The Journal of Eukaryotic Microbiology</i> , 62(2), 157–166. https://doi.org/10.1111/jeu.12154
KJ60903 6.1	<i>Trachelocerca orientalis</i>	Karyorelictea	-	Marine/Brackish	Yan, Y., Gao, F., Xu, Y., Al-Rasheid, K. A., & Song, W. (2015). Morphology and phylogeny of three trachelocercid ciliates, with description of a new species, <i>Trachelocerca orientalis</i> spec. nov. (Ciliophora, Karyorelictea). <i>The Journal of Eukaryotic Microbiology</i> , 62(2), 157–166. https://doi.org/10.1111/jeu.12154
KJ60903 8.1	<i>Tracheloraphis huangi</i>	Karyorelictea	-	Marine/Brackish	Yan, Y., Gao, F., Xu, Y., Al-Rasheid, K. A., & Song, W. (2015). Morphology and phylogeny of three trachelocercid ciliates, with description of a new species, <i>Trachelocerca orientalis</i> spec. nov. (Ciliophora, Karyorelictea). <i>The Journal of Eukaryotic Microbiology</i> , 62(2), 157–166. https://doi.org/10.1111/jeu.12154
KJ60904 9.1	<i>Strombidium guangdongense</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Liu, W., Xu, D., Ma, D., Al-Farraj, S. A., Warren, A., & Yi, Z. (2016). Taxonomy and molecular systematics of three oligotrich (s.l.) ciliates including descriptions of two new species, <i>Strombidium guangdongense</i> sp. nov. and <i>Strombidinopsis sinicum</i> sp. nov. (Protozoa, Ciliophora). <i>Systematics & Biodiversity</i> , 14:5, 452-465, DOI: 10.1080/14772000.2016.1162872
KJ60905 0.1	<i>Strombidiumropicus</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Gao, F., Li, J., Song, W., Xu, D., Warren, A., Yi, Z., & Gao, S. (2018). Multi-gene-based phylogenetic analysis of oligotrich ciliates with emphasis on two dominant groups: Cyrtostrombidiids and strombidiids (Protozoa, Ciliophora). <i>Molecular Phylogenetics and Evolution</i> , 105, 241–250. http://dx.doi.org/10.1016/j.ympev.2016.08.019
KJ60905 2.1	<i>Strombidium triquetrum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Gao, F., Li, J., Song, W., Xu, D., Warren, A., Yi, Z., & Gao, S. (2018). Multi-gene-based phylogenetic analysis of oligotrich ciliates with emphasis on two dominant groups: Cyrtostrombidiids and strombidiids (Protozoa, Ciliophora). <i>Molecular Phylogenetics and Evolution</i> , 105, 241–250. http://dx.doi.org/10.1016/j.ympev.2016.08.019
KJ61945 7.1	<i>Chaenea mirabilis</i>	Litostomatea	Haptoria	Marine/Brackish	Kwon, C. B., V'achný, P., Shazib, S. U., & Shin, M. K. (2014). Morphology and molecular phylogeny of a new haptorian ciliate, <i>Chaenea mirabilis</i> sp. n., with implications for the evolution of the dorsal brush in haptorians (Ciliophora, Litostomatea). <i>The Journal of Eukaryotic Microbiology</i> , 61(3), 278–292. https://doi.org/10.1111/jeu.12105

KJ61945 8.1	<i>Apoterritricha lutea</i>	Spirotrichea	Stichotrichia	Terrestrial	Kim, J. H., Vďačný, P., Shazib, S. U., & Shin, M. K. (2014). Morphology and molecular phylogeny of <i>Apoterritricha lutea</i> n. g., n. sp. (Ciliophora, Spirotrichea, Hypotrichia): a putative missing link connecting <i>Cyrtohymena</i> and <i>Afrokeronopsis</i> . <i>The Journal of Eukaryotic Microbiology</i> , 61(5), 520–536. https://doi.org/10.1111/jeu.12131
KJ64597 7.1	<i>Rubrioxxytricha haematoplasma</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Chen, W., Chen, X., Li, L., Warren, A., & Lin, X. (2015). Morphology, morphogenesis and molecular phylogeny of an oxytrichid ciliate, <i>Rubrioxxytricha haematoplasma</i> (Blatterer & Foissner, 1990) Berger, 1999 (Ciliophora, Hypotricha). <i>International Journal of Systematic and Evolutionary Microbiology</i> , 65, 309–320. https://doi.org/10.1099/ijs.0.067801-0
KJ64962 1.2	<i>Vaginicola sp</i>	Oligohymenophorea	Peritrichia	Symbiosis	Uribe-Palomino, Julian., Gastineau, R., Richardson, A., Wade, N., Whittock, L., Hallegraeff, G. M. (2021). New observations on the large hemidiscoid diatom <i>Palmerina ostenfeldii</i> and its symbiotic ciliate <i>Vaginicola collariforma</i> sp. nov. from subtropical Australian waters. <i>Diatom Research</i> , 1-17. https://doi.org/10.1080/0269249X.2021.1914737
KJ65181 3.1	<i>Blepharisma musculus</i>	Heterotrichea	-	Freshwater	Shazib, S. U., Vďačný, P., Kim, J. H., Jang, S. W., & Shin, M. K. (2014). Phylogenetic relationships of the ciliate class Heterotrichea (Protista, Ciliophora, Postciliodesmatophora) inferred from multiple molecular markers and multifaceted analysis strategy. <i>Molecular Phylogenetics & Evolution</i> , 78, 118–135. https://doi.org/10.1016/j.ympev.2014.05.012
KJ68055 0.1	<i>Monilicaryon monilatum</i>	Litostomatea	Haptoria	Freshwater	Jang, S. W., Vďacny, P., Shazib, S.U., & Shin, M. K. (2014). Morphological and molecular characterization of the name-bearing type species <i>Rimaleptus binucleatus</i> (Kahl, 1931), with a phylogenetic re-analysis of dileptid evolutionary history (Ciliophora: Litostomatea: Rhynchostomatia). <i>European Journal of Protistology</i> , 50(5), 456-471. http://dx.doi.org/10.1016/j.ejop.2014.07.003
KJ68055 1.1	<i>Pseudomonilicaryon anguillula</i>	Litostomatea	Trichostomatia	Terrestrial	Jang, S. W., Vďacny, P., Shazib, S.U., & Shin, M. K. (2014). Morphological and molecular characterization of the name-bearing type species <i>Rimaleptus binucleatus</i> (Kahl, 1931), with a phylogenetic re-analysis of dileptid evolutionary history (Ciliophora: Litostomatea: Rhynchostomatia). <i>European Journal of Protistology</i> , 50(5), 456-471. http://dx.doi.org/10.1016/j.ejop.2014.07.003
KJ68055 5.1	<i>Trachelophyllum brachypharynx</i>	Litostomatea	Haptoria	Marine/Brackish	Jang, S. W., Vďačný, P., Shazib, S. U. A., & Shin, M. K. (2015). Morphology, Ciliary Pattern and Molecular Phylogeny of <i>Trachelophyllum brachypharynx</i> Levander, 1894 (Litostomatea, Haptoria, Spathidiida). <i>Acta Protozoologica</i> , 54, 123-135. https://doi.org/10.108

KJ68055 6.1	<i>Kentrophyllum verrucosum</i>	Litostomatea	Haptoria	Marine/Brackish	Vdacny, P., Shin, M. K., Kim, J. H., Jang, S. W., & Shazib, S. U. A. (2015). Reconstruction of Evolutionary History of Pleurostomatid Ciliates (Ciliophora, Litostomatea, Haptoria): Interplay of Morphology and Molecules. <i>Acta Protozoologica</i> , 54, 9-29. https://doi.org/10.4467/16890027AP.15.0022189
KJ70498 7.1	<i>Parallelostrombidium ellipticum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Liu, W., Yi, Z., Li, J., Warren, A., Al-Farraj, S. A., & Lin, X. (2013). Taxonomy, morphology and phylogeny of three new oligotrich ciliates (Protozoa, Ciliophora, Oligotrichia) from southern China. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 63(Pt 12), 4805–4817. https://doi.org/10.1099/ijs.0.052878-0
KJ73743 2.1	<i>Strombidium paracalkinsi</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Lee, E. S., Kim, Y. O., Agatha, S., Jung, J. H., Xu, D., & Shin, M. K. (2015). Revision of <i>Strombidium paracalkinsi</i> (Ciliophora: Oligotrichia: Oligotrichia), with Comparison of Strombidiids Bearing Thigmotactic Membranelles. <i>The Journal of Eukaryotic Microbiology</i> , 62(3), 400–409. https://doi.org/10.1111/jeu.12195
KJ76611 0.1	<i>Deviata bacilliformis</i>	Spirotrichea	Stichotrichia	Terrestrial	Li, F., Lv, Z., Yi, Z., Al-Farraj, S. A., Al-Rasheid, K., & Shao, C. (2014). Taxonomy and phylogeny of two species of the genus <i>Deviata</i> (Protista, Ciliophora) from China, with description of a new soil form, <i>Deviata parabacilliformis</i> sp. nov. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 64(Pt 11), 3775–3785. https://doi.org/10.1099/ijs.0.068031-0
KJ76611 1.1	<i>Deviata parabacilliformis</i>	Spirotrichea	Stichotrichia	Terrestrial	Li, F., Lv, Z., Yi, Z., Al-Farraj, S. A., Al-Rasheid, K., & Shao, C. (2014). Taxonomy and phylogeny of two species of the genus <i>Deviata</i> (Protista, Ciliophora) from China, with description of a new soil form, <i>Deviata parabacilliformis</i> sp. nov. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 64(Pt 11), 3775–3785. https://doi.org/10.1099/ijs.0.068031-0
KJ76866 7.1	<i>Trachelocerca chinensis</i>	Karyorelictea	-	Marine/Brackish	Xu, Y., Yan, Y., Li, L., Al-Rasheid, K., Al-Farraj, S. A., & Song, W. (2014). Morphology and phylogeny of three karyorelictean ciliates (Protista, Ciliophora), including two novel species, <i>Trachelocerca chinensis</i> sp. n. and <i>Tracheloraphis dragescoi</i> sp. n. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 64(Pt 12), 4084–4097. https://doi.org/10.1099/ijs.0.068783-0
KJ76866 8.1	<i>Tracheloraphis dragescoi</i>	Karyorelictea	-	Marine/Brackish	Xu, Y., Yan, Y., Li, L., Al-Rasheid, K., Al-Farraj, S. A., & Song, W. (2014). Morphology and phylogeny of three karyorelictean ciliates (Protista, Ciliophora), including two novel species, <i>Trachelocerca chinensis</i> sp. n. and <i>Tracheloraphis dragescoi</i> sp. n. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 64(Pt 12), 4084–4097. https://doi.org/10.1099/ijs.0.068783-0
KJ84534 6.1	<i>Trichototaxis marina</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Lu, X., Gao, F., Shao, C., Hu, X., & Warren, A. (2014). Morphology, morphogenesis and molecular phylogeny of a new marine ciliate, <i>Trichototaxis marina</i> n. sp. (Ciliophora, Urostylelida). <i>European Journal of Protistology</i> , 50(5), 524–537. https://doi.org/10.1016/j.ejop.2014.08.002

KJ86492 6.1	<i>Urosomoida agilis</i>	Spirotrichea	Stichotrichia	Terrestrial	Singh, J., & Kamra, K. (2015). Molecular phylogeny of <i>Urosomoida agilis</i> , and new combinations: <i>Hemiurosomoida longa</i> gen. nov., comb. nov., and <i>Heterourosomoida lanceolata</i> gen. nov., comb. nov. (Ciliophora, Hypotricha). <i>European Journal of Protistology</i> , 51(1), 55–65. https://doi.org/10.1016/j.ejop.2014.11.005
KJ86614 8.1	<i>Condylostoma elongatum</i>	Heterotricha	-	Marine/Brackish	Yan, Y., Gao, F., Xu, Y., Al-Rasheid, K. A., & Song, W. (2015). Morphology and phylogeny of three trachelocercid ciliates, with description of a new species, <i>Trachelocerca orientalis</i> spec. nov. (Ciliophora, Karyorelictea). <i>The Journal of Eukaryotic Microbiology</i> , 62(2), 157–166. https://doi.org/10.1111/jeu.12154
KJ87017 4.1	<i>Charonina ventriculi</i>	Litostomatea	Trichostomatia	Symbiosis	Kittelmann, S., Devente, S. R., Kirk, M. R., Seedorf, H., Dehority, B. A., & Janssen, P. H. (2015). Phylogeny of intestinal ciliates, including <i>Charonina ventriculi</i> , and comparison of microscopy and 18S rRNA gene pyrosequencing for rumen ciliate community structure analysis. <i>Applied and Environmental Microbiology</i> , 81(7), 2433–2444. https://doi.org/10.1128/AEM.03697-14
KJ87304 5.1	<i>Bryometopus triquetrus</i>	Colpodea	-	Terrestrial	Foissner, W., Bourland, W. A., Wolf, K. W., Stoeck, T., & Dunthorn, M. (2014). New SSU-rDNA sequences for eleven colpodeans (Ciliophora, Colpodea) and description of <i>Apocyrtolophosis</i> nov. gen. <i>European Journal of Protistology</i> , 50, 40–46. http://dx.doi.org/10.1016/j.ejop.2013.09.003
KJ87304 6.1	<i>Colpoda ecaudata</i>	Colpodea	-	Terrestrial	Foissner, W., Bourland, W. A., Wolf, K. W., Stoeck, T., & Dunthorn, M. (2014). New SSU-rDNA sequences for eleven colpodeans (Ciliophora, Colpodea) and description of <i>Apocyrtolophosis</i> nov. gen. <i>European Journal of Protistology</i> , 50, 40–46. http://dx.doi.org/10.1016/j.ejop.2013.09.003
KJ87304 7.1	<i>Colpoda ellioti</i>	Colpodea	-	Terrestrial	Foissner, W., Bourland, W. A., Wolf, K. W., Stoeck, T., & Dunthorn, M. (2014). New SSU-rDNA sequences for eleven colpodeans (Ciliophora, Colpodea) and description of <i>Apocyrtolophosis</i> nov. gen. <i>European Journal of Protistology</i> , 50, 40–46. http://dx.doi.org/10.1016/j.ejop.2013.09.003
KJ87304 8.1	<i>Colpoda lucida</i>	Colpodea	-	Terrestrial	Foissner, W., Bourland, W. A., Wolf, K. W., Stoeck, T., & Dunthorn, M. (2014). New SSU-rDNA sequences for eleven colpodeans (Ciliophora, Colpodea) and description of <i>Apocyrtolophosis</i> nov. gen.
KJ87304 9.1	<i>Jaroschia sumptuosa</i>	Colpodea	-	Terrestrial	Foissner, W., Bourland, W. A., Wolf, K. W., Stoeck, T., & Dunthorn, M. (2014). New SSU-rDNA sequences for eleven colpodeans (Ciliophora, Colpodea) and description of <i>Apocyrtolophosis</i> nov. gen. <i>European Journal of Protistology</i> , 50, 40–46. http://dx.doi.org/10.1016/j.ejop.2013.09.003
KJ87305 0.1	<i>Kalometopia duplicata</i>	Colpodea	-	Terrestrial	Foissner, W., Bourland, W. A., Wolf, K. W., Stoeck, T., & Dunthorn, M. (2014). New SSU-rDNA sequences for eleven colpodeans (Ciliophora, Colpodea) and description of <i>Apocyrtolophosis</i> nov. gen. <i>European Journal of Protistology</i> , 50, 40–46. http://dx.doi.org/10.1016/j.ejop.2013.09.003

KJ87305 1.1	<i>Platyophrya spumacola</i>	Colpodea	-	Terrestrial	Foissner, W., Bourland, W. A., Wolf, K. W., Stoeck, T., & Dunthorn, M. (2014). New SSU-rDNA sequences for eleven colpodeans (Ciliophora, Colpodea) and description of <i>Apocyrtolophosis</i> nov. gen. <i>European Journal of Protistology</i> , 50, 40–46. http://dx.doi.org/10.1016/j.ejop.2013.09.003
KJ87305 3.1	<i>Repoma cavicola</i>	Colpodea	-	Terrestrial	Foissner, W., Bourland, W. A., Wolf, K. W., Stoeck, T., & Dunthorn, M. (2014). New SSU-rDNA sequences for eleven colpodeans (Ciliophora, Colpodea) and description of <i>Apocyrtolophosis</i> nov. gen. <i>European Journal of Protistology</i> , 50, 40–46. http://dx.doi.org/10.1016/j.ejop.2013.09.003
KJ95848 9.1	<i>Bakuella granulifera</i>	Spirotrichea	Stichotrichia	Terrestrial	Lv, Z., Shao, C., Yi, Z., & Warren, A. (2015). A molecular phylogenetic investigation of <i>Bakuella</i> , <i>Anteholosticha</i> , and <i>Caudiholosticha</i> (protista, ciliophora, hypotrichia) based on three-gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 62(3), 391–399. https://doi.org/10.1111/jeu.12194
KJ95849 1.1	<i>Adumbratosticha tetracirrata</i>	Spirotrichea	Stichotrichia	Freshwater	Lv, Z., Shao, C., Yi, Z., & Warren, A. (2015). A molecular phylogenetic investigation of <i>Bakuella</i> , <i>Anteholosticha</i> , and <i>Caudiholosticha</i> (protista, ciliophora, hypotrichia) based on three-gene sequences. <i>The Journal of Eukaryotic Microbiology</i> , 62(3), 391–399. https://doi.org/10.1111/jeu.12194
KM02512 5.1	<i>Kentrophyllum bispinus</i>	Litostomatea	Haptoria	Marine/Brackish	Wu, L., Clamp, J. C., Yi, Z., Li, J., & Lin, X. (2015). Phylogenetic and Taxonomic Revision of an Enigmatic Group of Haptorian Ciliates, with Establishment of the Kentrophyllidae fam. n. (Protozoa, Ciliophora, Litostomatea, Pleurostomatida). <i>PloS One</i> , 10(5), e0123720. https://doi.org/10.1371/journal.pone.0123720
KM02512 6.1	<i>Kentrophyllum strumosus</i>	Litostomatea	Haptoria	Marine/Brackish	Wu, L., Clamp, J. C., Yi, Z., Li, J., & Lin, X. (2015). Phylogenetic and Taxonomic Revision of an Enigmatic Group of Haptorian Ciliates, with Establishment of the Kentrophyllidae fam. n. (Protozoa, Ciliophora, Litostomatea, Pleurostomatida). <i>PloS One</i> , 10(5), e0123720. https://doi.org/10.1371/journal.pone.0123720
KM02512 8.1	<i>Amphileptus bellus</i>	Litostomatea	Haptoria	Marine/Brackish	Wu, L., Yi, Z., Li, J., Warren, A., Xu, H., & Lin, X. (2015). Two New Brackish Ciliates, <i>Amphileptus spiculatus</i> sp. n. and <i>A. bellus</i> sp. n. from Mangrove Wetlands in Southern China, with Notes on the Molecular Phylogeny of the Family Amphileptidae (Protozoa, Ciliophora, Pleurostomatida). <i>The Journal of Eukaryotic Microbiology</i> , 62(5), 662–669. https://doi.org/10.1111/jeu.12225
KM02512 9.1	<i>Amphileptus spiculatus</i>	Litostomatea	Haptoria	Marine/Brackish	Wu, L., Yi, Z., Li, J., Warren, A., Xu, H., & Lin, X. (2015). Two New Brackish Ciliates, <i>Amphileptus spiculatus</i> sp. n. and <i>A. bellus</i> sp. n. from Mangrove Wetlands in Southern China, with Notes on the Molecular Phylogeny of the Family Amphileptidae (Protozoa, Ciliophora, Pleurostomatida). <i>The Journal of Eukaryotic Microbiology</i> , 62(5), 662–669. https://doi.org/10.1111/jeu.12225

KM05784 6.1	<i>Balantidium duodeni</i>	Litostomatea	Trichostomatia	Symbiosis	Chistyakova, L. V., Kostygov, A. Y., Kornilova, O. A., & Yurchenko, V. (2014). Reisolation and redescription of <i>Balantidium duodeni</i> Stein, 1867 (Litostomatea, Trichostomatia). <i>Parasitology Research</i> , 113(11), 4207–4215. https://doi.org/10.1007/s00436-014-4096-1
KM06138 4.1	<i>Cyrtohymena muscorum</i>	Spirotrichea	Hypotrichia	Freshwater	Jung, J. H., Park, K. M., & Min, G. S. (2015). Morphology and Molecular Phylogeny of <i>Pseudocyrtohymena koreana</i> n. g., n. sp. and Antarctic <i>Neokeronopsis asiatica</i> Foissner et al., 2010 (Ciliophora, Sporadotrichida), with a Brief Discussion of the <i>Cyrtohymena</i> Undulating Membranes Pattern. <i>Journal of Eukaryotic Microbiology</i> , 62(3), 280-297. https://doi.org/10.1111/jeu.12179
KM06138 6.1	<i>Neokeronopsis asiatica</i>	Spirotrichea	Stichotrichia	Freshwater	Jung, J. H., Park, K. M., & Min, G. S. (2015). Morphology and Molecular Phylogeny of <i>Pseudocyrtohymena koreana</i> n. g., n. sp. and Antarctic <i>Neokeronopsis asiatica</i> Foissner et al., 2010 (Ciliophora, Sporadotrichida), with a Brief Discussion of the <i>Cyrtohymena</i> Undulating Membranes Pattern. <i>Journal of Eukaryotic Microbiology</i> , 62(3), 280-297. https://doi.org/10.1111/jeu.12179
KM08472 6.1	<i>Strombidium chlorophilum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Song, W., Li, J., Liu, W., Al-Rasheid, K. A. S., Hu, X., & Lin, X. (2015). Taxonomy and molecular phylogeny of four <i>Strombidium</i> species, including description of <i>S. pseudostylifer</i> sp. nov. (Ciliophora, Oligotrichia). <i>Systematics & Biodiversity</i> , 13(1), 76-92. http://dx.doi.org/10.1080/14772000.2014.970674
KM08472 7.1	<i>Strombidium oculatum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Song, W., Li, J., Liu, W., Al-Rasheid, K. A. S., Hu, X., & Lin, X. (2015). Taxonomy and molecular phylogeny of four <i>Strombidium</i> species, including description of <i>S. pseudostylifer</i> sp. nov. (Ciliophora, Oligotrichia). <i>Systematics & Biodiversity</i> , 13(1), 76-92. http://dx.doi.org/10.1080/14772000.2014.970674
KM08472 8.1	<i>Strombidium pseudostylifer</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Song, W., Li, J., Liu, W., Al-Rasheid, K. A. S., Hu, X., & Lin, X. (2015). Taxonomy and molecular phylogeny of four <i>Strombidium</i> species, including description of <i>S. pseudostylifer</i> sp. nov. (Ciliophora, Oligotrichia). <i>Systematics & Biodiversity</i> , 13(1), 76-92. http://dx.doi.org/10.1080/14772000.2014.970674
KM09123 4.1	<i>Paramecium buetschlii</i>	Oligohymenophorea	Peniculia	Freshwater	Krenek, S., Berendonk, T. U., & Fokin, S. I. (2015). New <i>Paramecium</i> (Ciliophora, Oligohymenophorea) congeners shape our view on its biodiversity. <i>Organisms, Diversity, & Evolution</i> , 15, 215-233. https://doi.org/10.1007/s13127-015-0207-9
KM09123 5.1	<i>Paramecium chlorelligerum</i>	Oligohymenophorea	Peniculia	Freshwater	Krenek, S., Berendonk, T. U., & Fokin, S. I. (2015). New <i>Paramecium</i> (Ciliophora, Oligohymenophorea) congeners shape our view on its biodiversity. <i>Organisms, Diversity, & Evolution</i> , 15, 215-233. https://doi.org/10.1007/s13127-015-0207-9

KM10326 3.1	<i>Dysteria paraprocera</i>	Phylopharyng ea	Cyrtophoria	Marine/Brac kish	Qu, Z., Wang, C., Gao, F., Li, J., Al- Rasheid, K. A., & Hu, X. (2015). Taxonomic studies on seven species of Dysteria (Ciliophora, Cyrtophoria), including a description of <i>Dysteria paraprocera</i> sp. n. <i>European Journal of Protistology</i> , 51(3), 241–258. https://doi.org/10.1016/j.ejop.2015.04.005
KM22209 1.1	<i>Hemiamphisiella qingdaoensi</i>	Spirotrichea	-	Terrestrial	Gao, F., Li, J., Song, W., Xu, D., Warren, A., Yi, Z., & Gao, S. (2018). Multi-gene- based phylogenetic analysis of oligotrich ciliates with emphasis on two dominant groups: Cyrtostrombidiids and strombidiids (Protozoa, Ciliophora). <i>Molecular Phylogenetics and Evolution</i> , 105, 241– 250. http://dx.doi.org/10.1016/j.ympev.2016.08.019
KM22209 5.1	<i>Pseudokahliella marina</i>	Spirotrichea	Stichotrichia	Marine/Brac kish	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The All-Data-Based Evolutionary Hypothesis of Ciliated Protists with a Revised Classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 24874. https://doi.org/10.1038/srep24874
KM22209 6.1	<i>Tachysoma pellionellum</i>	Spirotrichea	Stichotrichia	Marine/Brac kish	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The All-Data-Based Evolutionary Hypothesis of Ciliated Protists with a Revised Classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 24874. https://doi.org/10.1038/srep24874
KM22209 7.1	<i>Certesias quadrinucleata</i>	Spirotrichea	Euplotia	Marine/Brac kish	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The All-Data-Based Evolutionary Hypothesis of Ciliated Protists with a Revised Classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 24874. https://doi.org/10.1038/srep24874
KM22209 8.1	<i>Spirostrombidium schizostomum</i>	Spirotrichea	Oligotrichia	Marine/Brac kish	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The All-Data-Based Evolutionary Hypothesis of Ciliated Protists with a Revised Classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 24874. https://doi.org/10.1038/srep24874
KM22209 9.1	<i>Favella campanula</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The All-Data-Based Evolutionary Hypothesis of Ciliated Protists with a Revised Classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 24874. https://doi.org/10.1038/srep24874
KM22210 2.1	<i>Helicoprordod maximus</i>	Litostomatea	Haptoria	Marine/Brac kish	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.

KM22210 3.1	<i>Nolandia orientalis</i>	Prostomatea	-	Marine/Brackish	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The All-Data-Based Evolutionary Hypothesis of Ciliated Protists with a Revised Classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 24874. https://doi.org/10.1038/srep24874
KM22210 4.1	<i>Prorodon ovum</i>	Prostomatea	-	Marine/Brackish	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The All-Data-Based Evolutionary Hypothesis of Ciliated Protists with a Revised Classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 24874. https://doi.org/10.1038/srep24874
KM22210 8.1	<i>Condylostoma magnum</i>	Heterotrichea	-	Marine/Brackish	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The all-data-based evolutionary hypothesis of ciliated Protists with a revised classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 1-14.
KM59456 6.1	<i>Epistylis riograndensis</i>	Oligohymenophorea	Peritrichia	Freshwater	Utz, L. R., Farias, A. C., Freitas, E. C., & de Araújo, G. O. (2014). Description of <i>Epistylis riograndensis</i> n.sp. (Ciliophora: Peritrichia) found in an artificial lake in Southern Brazil. <i>Zootaxa</i> , 3869(5), 557–564. https://doi.org/10.11646/zootaxa.3869.5.5
KM59715 7.1	<i>Gonostomum paronense</i>	Spirotrichea	Stichotrichia	Terrestrial	Bharti, D., Kumar, S., & La Terza, A. (2015). Two Gonostomatid Ciliates from the Soil of Lombardia, Italy; including Note on the Soil Mapping Project. <i>Journal of Eukaryotic Microbiology</i> , 62, 762–772. https://doi.org/10.1111/jeu.12234
KM88795 4.1	<i>Zoothamnium grossi</i>	Oligohymenophorea	Peritrichia	Marine/Brackish	Ji, D., Kim, J. H., Shazib, S. U., Sun, P., Li, L., & Shin, M. K. (2015). Two New Species of <i>Zoothamnium</i> (Ciliophora, Peritrichia) from Korea, with New Observations of <i>Z. parahentscheli</i> Sun et al., 2009. <i>Journal of Eukaryotic Microbiology</i> , 62(4), 505-518. https://doi.org/10.1111/jeu.12205
KM88795 5.1	<i>Zoothamnium arcuatum</i>	Oligohymenophorea	Peritrichia	Marine/Brackish	Ji, D., Kim, J. H., Shazib, S. U., Sun, P., Li, L., & Shin, M. K. (2015). Two New Species of <i>Zoothamnium</i> (Ciliophora, Peritrichia) from Korea, with New Observations of <i>Z. parahentscheli</i> Sun et al., 2009. <i>Journal of Eukaryotic Microbiology</i> , 62(4), 505-518. https://doi.org/10.1111/jeu.12205
KM88795 6.1	<i>Zoothamnium parahentscheli</i>	Oligohymenophorea	Peritrichia	Marine/Brackish	Ji, D., Kim, J. H., Shazib, S. U., Sun, P., Li, L., & Shin, M. K. (2015). Two New Species of <i>Zoothamnium</i> (Ciliophora, Peritrichia) from Korea, with New Observations of <i>Z. parahentscheli</i> Sun et al., 2009. <i>Journal of Eukaryotic Microbiology</i> , 62(4), 505-518. https://doi.org/10.1111/jeu.12205
KM92376 4.1	<i>Rigidohymena inquieta</i>	Spirotrichea	Stichotrichia	Terrestrial	Yang, C., Liu, A., Xu, Y., Xu, Y., Fan, X., Al-Farraj, S. A., Ni, B., & Gu, F. (2015). Phylogenetic positions of four hypotrichous ciliates (Protista, Ciliophora) based on SSU rRNA gene, with notes on their morphological characters. <i>Zootaxa</i> , 4000(4), 451–463. https://doi.org/10.11646/zootaxa.4000.4.4

KM92430 7.1	<i>Sterkiella subtropica</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Chen, X., Gao, F., Al-Farraj, S. A., Al-Rasheid, K. A. S., Xu, K., & Song, W. (2015). Morphology and morphogenesis of a novel mangrove ciliate, <i>Sterkiella subtropica</i> sp. nov. (Protozoa, Ciliophora, Hypotrichia), with phylogenetic analyses based on small-subunit rDNA sequence data. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 65, 2291-2303. https://doi.org/10.1099/ijs.0.000253
KM98281 0.1	<i>Tintinnopsis lata</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Santoferrara, L. F., Tian, M., Alder, V. A., & McManus, G. B. (2015). Discrimination of Closely Related Species in Tintinnid Ciliates: New Insights on Crypticity and Polymorphism in the Genus <i>Helicostomella</i> . <i>Protist</i> , 166, 78–92. https://doi.org/10.1016/j.protis.2014.11.005
KM98281 1.1	<i>Tintinnopsis levigata</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Santoferrara, L. F., Tian, M., Alder, V. A., & McManus, G. B. (2015). Discrimination of Closely Related Species in Tintinnid Ciliates: New Insights on Crypticity and Polymorphism in the Genus <i>Helicostomella</i> . <i>Protist</i> , 166, 78–92. https://doi.org/10.1016/j.protis.2014.11.005
KP01014 8.1	<i>Litonotus gracilis</i>	Litostomatea	Haptoria	Marine/Brackish	Pan, H., Li, L., Wu, L., Miao, M., Al-Rasheid, K. A., & Song, W. (2015). Morphology of three <i>Litonotus</i> species (Ciliophora: Pleurostomatida) from China seas, with brief notes on their SSU rDNA-based phylogeny. <i>European Journal of Protistology</i> , 51(5), 494–506. https://doi.org/10.1016/j.ejop.2015.08.003
KP01671 8.1	<i>Buxtonella sulcata</i>	Litostomatea	Trichostomatia	Symbiosis	Grim, J. N., Jirku-Pomajbíková, K., & Ponce-Gordo, F. (2015). Light microscopic morphometrics, ultrastructure, and molecular phylogeny of the putative pycnotrichid Ciliate, <i>Buxtonella sulcata</i> . <i>European Journal of Protistology</i> , 51(5), 425-436. https://doi.org/10.1016/j.ejop.2015.06.003
KP10045 1.1	<i>Notohymena australis</i>	Spirotrichea	Stichotrichia	Freshwater	Yang, C., Liu, A., Xu, Y., Xu, Y., Fan, X., Al-Farraj, S. A., Ni, B., & Gu, F. (2015). Phylogenetic positions of four hypotrichous ciliates (Protista, Ciliophora) based on SSU rRNA gene, with notes on their morphological characters. <i>Zootaxa</i> , 4000(4), 451–463. https://doi.org/10.11646/zootaxa.4000.4.4
KP10045 2.1	<i>Cyrtohymena australis</i>	Spirotrichea	Hypotrichia	Terrestrial	Yang, C., Liu, A., Xu, Y., Xu, Y., Fan, X., Al-Farraj, S. A., Ni, B., & Gu, F. (2015). Phylogenetic positions of four hypotrichous ciliates (Protista, Ciliophora) based on SSU rRNA gene, with notes on their morphological characters. <i>Zootaxa</i> , 4000(4), 451–463. https://doi.org/10.11646/zootaxa.4000.4.4
KP23389 6.1	<i>Atractos contortus</i>	Spirotrichea	Stichotrichia	Freshwater	Bourland W. A. (2015). Morphology, ontogenesis and molecular characterization of <i>Atractos contortus</i> Vörösváry, 1950 and <i>Stichotricha aculeata</i> Wrzesniowski, 1866 (Ciliophora, Stichotrichida) with consideration of their systematic positions. <i>European Journal of Protistology</i> , 51(5), 351–373. https://doi.org/10.1016/j.ejop.2015.06.004

KP26051 0.1	<i>Strombidium capitatum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Song, W., Zhao, X., Liu, W., Hu, X., Al-Farraj, S. A., Al-Rasheid, K. A. S., Song, W., & Warren, A. (2015). Biodiversity of oligotrich ciliates in the South China Sea: description of three new <i>Strombidium</i> species (Protozoa, Ciliophora, Oligotrichia) with phylogenetic analyses. <i>Systematics & Biodiversity</i> , 13(6), 608-623. http://dx.doi.org/10.1080/14772000.2015.1081992
KP26051 1.1	<i>Strombidium paracapitatum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Song, W., Zhao, X., Liu, W., Hu, X., Al-Farraj, S. A., Al-Rasheid, K. A. S., Song, W., & Warren, A. (2015). Biodiversity of oligotrich ciliates in the South China Sea: description of three new <i>Strombidium</i> species (Protozoa, Ciliophora, Oligotrichia) with phylogenetic analyses. <i>Systematics & Biodiversity</i> , 13(6), 608-623. http://dx.doi.org/10.1080/14772000.2015.1081992
KP26051 2.1	<i>Strombidium cuneiforme</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Song, W., Zhao, X., Liu, W., Hu, X., Al-Farraj, S. A., Al-Rasheid, K. A. S., Song, W., & Warren, A. (2015). Biodiversity of oligotrich ciliates in the South China Sea: description of three new <i>Strombidium</i> species (Protozoa, Ciliophora, Oligotrichia) with phylogenetic analyses. <i>Systematics & Biodiversity</i> , 13(6), 608-623. http://dx.doi.org/10.1080/14772000.2015.1081992
KP26662 5.1	<i>Lamtostyla ovalis</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Luo, X., Gao, F., Yi, Z., Pan, Y., Al-Farraj, S. A., & Warren, A. (2017). Taxonomy and molecular phylogeny of two new brackish hypotrichous ciliates, with the establishment of a new genus (Ciliophora, Spirotrichea). <i>Zoological Journal of the Linnean Society</i> , 179(3), 475–491. https://doi.org/10.1111/zoj.12451
KP26662 7.1	<i>Pseudogastrostyla flava</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Fan, Y., Zhao, X., Hu, X., Miao, M., Warren, A., & Song, W. (2015). Taxonomy and molecular phylogeny of two novel ciliates, with establishment of a new genus, <i>Pseudogastrostyla</i> n. g. (Ciliophora, Hypotrichia, Oxytrichidae). <i>European Journal of Protistology</i> , 51, 374–385. https://doi.org/10.1016/j.ejop.2015.06.007
KP27112 5.1	<i>Stylonychia harbinensis</i>	Spirotrichea	Hypotrichia	Terrestrial	Bharti, D., Kumar, S., & La Terza, A. (2015). Two Gonostomatid Ciliates from the Soil of Lombardia, Italy; including Note on the Soil Mapping Project. <i>The Journal of Eukaryotic Microbiology</i> , 62(6), 762–772. https://doi.org/10.1111/jeu.12234
KP28006 4.1	<i>Urosomoida subtropica</i>	Spirotrichea	Stichotrichia	Freshwater	Fan, Y., Zhao, X., Hu, X., Miao, M., Warren, A., & Song, W. (2015). Taxonomy and molecular phylogeny of two novel ciliates, with establishment of a new genus, <i>Pseudogastrostyla</i> n. g. (Ciliophora, Hypotrichia, Oxytrichidae). <i>European Journal of Protistology</i> , 51, 374–385. https://doi.org/10.1016/j.ejop.2015.06.007
KP29547 3.1	<i>Trichodina centrostrigata</i>	Oligohymenophorea	Peritrichia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.

KP33640 1.1	<i>Tetmemena sp</i>	Spirotrichea	Hypotrichia	Freshwater	Gupta, R., Abraham, J. S., Sripoorna, S., Maurya, S., Toteja, R., Makhija, S., Al-Misned, F. A., & El-Serehy, H. A. (2020). Description of a new species of <i>Tetmemena</i> (Ciliophora, Oxytrichidae) using classical and molecular markers. <i>Journal of King Saud University - Science</i> , 32(4), 2316-2328. https://doi.org/10.1016/j.jksus.2020.03.009
KP33640 2.1	<i>Aponotohymena isoaustralis</i>	Spirotrichea	-	Freshwater	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
KP69820 5.1	<i>Urceolaria parakorschelti</i>	Oligohymenophorea	Peritrichia	Symbiosis	Irwin, N. A., & Lynn, D. H. (2015). Molecular Phylogeny of Mobilid and Sessilid Ciliates Symbiotic in Eastern Pacific Limpets (Mollusca: Patellogastropoda). <i>Journal of Eukaryotic Microbiology</i> , 62(4), 543-552. https://doi.org/10.1111/jeu.12208
KP69820 7.1	<i>Scyphidia ubiquita</i>	Oligohymenophorea	Peritrichia	Symbiosis	Irwin, N. A., & Lynn, D. H. (2015). Molecular Phylogeny of Mobilid and Sessilid Ciliates Symbiotic in Eastern Pacific Limpets (Mollusca: Patellogastropoda). <i>Journal of Eukaryotic Microbiology</i> , 62(4), 543-552. https://doi.org/10.1111/jeu.12208
KP69821 0.1	<i>Mantoscaphidia branchi</i>	Oligohymenophorea	Peritrichia	Symbiosis	Irwin, N. A., & Lynn, D. H. (2015). Molecular Phylogeny of Mobilid and Sessilid Ciliates Symbiotic in Eastern Pacific Limpets (Mollusca: Patellogastropoda). <i>Journal of Eukaryotic Microbiology</i> , 62(4), 543-552. https://doi.org/10.1111/jeu.12208
KP71708 2.1	<i>Holosticha heterofoissneri</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Luo, X., Gao, F., Al-Rasheid, K. A. S., Warren, A., Hu, X., & Song, W. (2015). Redefinition of the hypotrichous ciliate Uncinata, with descriptions of the morphology and phylogeny of three urostylids (Protista, Ciliophora). <i>Systematics & Biodiversity</i> , 13, 5, 455-471. http://dx.doi.org/10.1080/14772000.2015.1046967
KP71708 3.1	<i>Uncinata gigantea</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
KP86876 7.1	<i>Dimacrocyon amphileptoides</i>	Litostomatea	Haptoria	Terrestrial	Vd'ačný, P., & Rajter, L. (2015). Reconciling morphological and molecular classification of predatory ciliates: Evolutionary taxonomy of dileptids (Ciliophora, Litostomatea, Rhynchostomatia). <i>Molecular Phylogenetics & Evolution</i> , 90, 112-128. https://doi.org/10.1016/j.ympev.2015.04.023
KP86876 8.1	<i>Microdileptus breviproboscis</i>	Litostomatea	Haptoria	Terrestrial	Vd'ačný, P., & Rajter, L. (2015). Reconciling morphological and molecular classification of predatory ciliates: Evolutionary taxonomy of dileptids (Ciliophora, Litostomatea, Rhynchostomatia). <i>Molecular Phylogenetics & Evolution</i> , 90, 112-128. https://doi.org/10.1016/j.ympev.2015.04.023
KP86876 9.1	<i>Pseudomonilicaryon brachyproboscis</i>	Litostomatea	Trichostomatia	Terrestrial	Vd'ačný, P., & Rajter, L. (2015). Reconciling morphological and molecular classification of predatory ciliates: Evolutionary taxonomy of dileptids (Ciliophora, Litostomatea, Rhynchostomatia). <i>Molecular Phylogenetics & Evolution</i> , 90, 112-128. https://doi.org/10.1016/j.ympev.2015.04.023

KP86877 0.1	<i>Rurikoplites alpinus</i>	Litostomatea	Trichostomatia	Terrestrial	Vd'ačný, P., & Rajter, L. (2015). Reconciling morphological and molecular classification of predatory ciliates: Evolutionary taxonomy of dileptids (Ciliophora, Litostomatea, Rhynchostomatia). <i>Molecular Phylogenetics & Evolution</i> , 90, 112–128. https://doi.org/10.1016/j.ympev.2015.04.023
KP87017 9.1	<i>Protolitonotus magnu</i>	Litostomatea	Haptoria	Marine/Brackish	Wu, L., Jiao, X., Shen, Z., Yi, Z., Li, J., Warren, A. & Lin, X. (2016). New taxa refresh the phylogeny and classification of pleurostomatid ciliates (Ciliophora, Litostomatea). <i>Zoologica Scripta</i> , 46, 245–253. https://doi.org/10.1111/zsc.12193
KP87018 0.1	<i>Acineria incurvata</i>	Litostomatea	Haptoria	Marine/Brackish	Wu, L., Jiao, X., Shen, Z., Yi, Z., Li, J., Warren, A. & Lin, X. (2016). New taxa refresh the phylogeny and classification of pleurostomatid ciliates (Ciliophora, Litostomatea). <i>Zoologica Scripta</i> , 46, 245–253. https://doi.org/10.1111/zsc.12193
KP87018 1.1	<i>Protolitonotus longus</i>	Litostomatea	Haptoria	Marine/Brackish	Wu, L., Jiao, X., Shen, Z., Yi, Z., Li, J., Warren, A. & Lin, X. (2016). New taxa refresh the phylogeny and classification of pleurostomatid ciliates (Ciliophora, Litostomatea). <i>Zoologica Scripta</i> , 46, 245–253. https://doi.org/10.1111/zsc.12193
KP88328 3.1	<i>Metacylis tropica</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Lee, K.-W., & Choi, Y.-U. (2016). Population growth of a tropical tintinnid, <i>Metacylis tropica</i> on different temperature, salinity and diet. <i>Journal of the Korea Academia-Industrial Cooperation Society</i> , 17(9), 322–328. https://doi.org/10.5762/kais.2016.17.9.322
KP97024 5.1	<i>Stentor igneus</i>	Heterotrichea	-	Freshwater	Fernandes, N. M., Paiva, T., da Silva-Neto, I. D., Schlegel, M., & Schrago, C. G. (2016). Expanded phylogenetic analyses of the class Heterotrichea (Ciliophora, Postciliodesmatophora) using five molecular markers and morphological data. <i>Molecular Phylogenetics and Evolution</i> , 95, 229–246. https://doi.org/10.1016/j.ympev.2015.10.030
KR00562 5.1	<i>Chilodonella piscicola</i>	Phyllopharyngia	Phyllopharyngia	Symbiosis	Deng, Q., Guo, Q., Zhai, Y., Wang, Z., & Gu, Z. (2015). First record of <i>Chilodonella piscicola</i> (Ciliophora: Chilodonellidae) from two endangered fishes, <i>Schizothorax o'connori</i> and <i>Oxygymnocypris stewartii</i> in Tibet. <i>Parasitology Research</i> , 114, 3097–3103. https://doi.org/10.1007/s00436-015-4527-7
KR01323 8.1	<i>Neourostylopsis flava</i>	Spirotrichea	Stichotrichia	Freshwater	Pan, X., Fan, Y., Gao, F., Qiu, Z., Al-Farraj, S. A., Warren, A., & Shao, C. (2016). Morphology and systematics of two freshwater urostyloid ciliates, with description of a new species (Protista, Ciliophora, Hypotrichia). <i>European Journal of Protistology</i> , 52, 73–84. https://doi.org/10.1016/j.ejop.2015.11.003
KR01323 9.1	<i>Pseudourostyla subtropica</i>	Spirotrichea	Stichotrichia	Freshwater	Pan, X., Fan, Y., Gao, F., Qiu, Z., Al-Farraj, S. A., Warren, A., & Shao, C. (2016). Morphology and systematics of two freshwater urostyloid ciliates, with description of a new species (Protista, Ciliophora, Hypotrichia). <i>European Journal of Protistology</i> , 52, 73–84. https://doi.org/10.1016/j.ejop.2015.11.003

KR02401 0.1	<i>Bakuella litoralis</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Jo, E., Jung, J. H., & Min, G. S. (2015). Morphology and Molecular Phylogeny of Two New Brackish Water Ciliates of <i>Bakuella</i> (Ciliophora: Urostylelida: Bakuellidae) from South Korea. <i>Journal of Eukaryotic Microbiology</i> , 62(6), 799-809. https://doi.org/10.1111/jeu.12238
KR02401 1.1	<i>Bakuella incheonensis</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Jo, E., Jung, J. H., & Min, G. S. (2015). Morphology and Molecular Phylogeny of Two New Brackish Water Ciliates of <i>Bakuella</i> (Ciliophora: Urostylelida: Bakuellidae) from South Korea. <i>Journal of Eukaryotic Microbiology</i> , 62(6), 799-809. https://doi.org/10.1111/jeu.12238
KR06327 3.1	<i>Parentocirrus sp</i>	Spirotrichea	-	-	-
KR26389 3.1	<i>Strombidinopsis sinicum</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Liu, W., Xu, D., Ma, D., Al-Farraj, S. A., Warren, A., & Yi, Z. (2016). Taxonomy and molecular systematics of three oligotrich (s.l.) ciliates including descriptions of two new species, <i>Strombidium guangdongense</i> sp. nov. and <i>Strombidinopsis sinicum</i> sp. nov. (Protozoa, Ciliophora). <i>Systematics & Biodiversity</i> , 14:5, 452-465, DOI: 10.1080/14772000.2016.1162872
KR61108 2.2	<i>Pseudochilodonopsis quadrivacuolata</i>	Phyllopharyngia	Phyllopharyngia	Marine/Brackish	Qu, Z., Pan, H., Al-Rasheid, K., Hu, X., & Gao, S. (2015). Morphological and phylogenetic studies on three members of the genus <i>Pseudochilodonopsis</i> (Ciliophora, Cyrtophoria) isolated from brackish waters in China, including a novel species, <i>Pseudochilodonopsis quadrivacuolata</i> sp. nov. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 65(12), 4323-4334. https://doi.org/10.1099/ijsem.0.000580
KR61108 4.2	<i>Pseudochilodonopsis mutabilis</i>	Phyllopharyngia	Phyllopharyngia	Marine/Brackish	Qu, Z., Pan, H., Al-Rasheid, K., Hu, X., & Gao, S. (2015). Morphological and phylogenetic studies on three members of the genus <i>Pseudochilodonopsis</i> (Ciliophora, Cyrtophoria) isolated from brackish waters in China, including a novel species, <i>Pseudochilodonopsis quadrivacuolata</i> sp. nov. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 65(12), 4323-4334. https://doi.org/10.1099/ijsem.0.000580
KR61227 0.1	<i>Caudiholosticha marina</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Li, J., Chen, X., & Xu, K. (2016). Morphology and Small Subunit rDNA Phylogeny of Two New Marine Urostylelid Ciliates, <i>Caudiholosticha marina</i> sp. nov. and <i>Nothoholosticha flava</i> sp. nov. (Ciliophora, Hypotrichia). <i>The Journal of Eukaryotic Microbiology</i> , 63(4), 460-470. https://doi.org/10.1111/jeu.12290
KR61227 1.1	<i>Nothoholosticha flava</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Li, J., Chen, X., & Xu, K. (2016). Morphology and Small Subunit rDNA Phylogeny of Two New Marine Urostylelid Ciliates, <i>Caudiholosticha marina</i> sp. nov. and <i>Nothoholosticha flava</i> sp. nov. (Ciliophora, Hypotrichia). <i>The Journal of Eukaryotic Microbiology</i> , 63(4), 460-470. https://doi.org/10.1111/jeu.12290
KR70161 1.1	<i>Stichotricha aculeata</i>	Spirotrichea	Stichotrichia	Freshwater	Bourland, W. A. (2015). Morphology, ontogenesis and molecular characterization of <i>Atractos contortus</i> Vörösváry, 1950 and <i>Stichotricha aculeata</i> Wrzesniowskiego, 1866 (Ciliophora, Stichotrichida) with consideration of their systematic positions. <i>European Journal of Protistology</i> , 51, 351-373. http://dx.doi.org/10.1016/j.ejop.2015.06.004

KR77877 8.1	<i>Tetrahymena rostrata</i>	Oligohymenophorea	Hymenostomata	Symbiosis	Stout, J. D., 1954. The ecology, life history and parasitism of <i>Tetrahymena (Paraglaucoma) rostrata</i> (Kahl) Corliss. <i>The Journal of Protozoology</i> , 1, 211–215. https://doi.org/10.1111/j.1550-7408.1954.tb00819.x
KR81591 3.1	<i>Blepharisma penardi</i>	Heterotrichea	-	Freshwater	Yan, Y., Fan, Y., Chen, X., Li, L., Warren, A., Al-Farraj, S.A., & Song, W. (2016). Description of three heterotrich ciliates. <i>Zoological Journal of the Linnean Society</i> , 177, 320-334. https://doi.org/10.1111/zoj.12369
KR81767 5.1	<i>Rubrioxysticha tsinlingensis</i>	Spirotrichea	Stichotrichia	Freshwater	Chen, L, Zhao, X., Shao, C., Miao, M., & Clamp, J. C. (2016). Morphology and phylogeny of two new ciliates, <i>Sterkiella sinica</i> sp. nov. and <i>Rubrioxysticha tsinlingensis</i> sp. nov. (Protozoa, Ciliophora, Hypotrichia) from north-west China. <i>Systematics and Biodiversity</i> , 15 (2), 131-142. https://doi.org/10.1080/14772000.2016.1219426
KR81767 6.1	<i>Sterkiella sinica</i>	Spirotrichea	Hypotrichia	Terrestrial	Chen, L, Zhao, X., Shao, C., Miao, M., & Clamp, J. C. (2016). Morphology and phylogeny of two new ciliates, <i>Sterkiella sinica</i> sp. nov. and <i>Rubrioxysticha tsinlingensis</i> sp. nov. (Protozoa, Ciliophora, Hypotrichia) from north-west China. <i>Systematics and Biodiversity</i> , 15 (2), 131-142. https://doi.org/10.1080/14772000.2016.1219426
KT00328 1.1	<i>Paraholosticha muscicola</i>	Spirotrichea	Stichotrichia	Terrestrial	Jung, J.-H., Park, K.-M., Min, G.-S., Berger, H., & Kim, S. (2014). Morphology and molecular phylogeny of an Antarctic population of <i>Paraholosticha muscicola</i> (Kahl, 1932) Wenzel, 1953 (Ciliophora, Hypotrichia). <i>Polar Science</i> , 9, 374e381. http://dx.doi.org/10.1016/j.polar.2015.08.005
KT07263 3.1	<i>Levicoleps taehwae</i>	Armophorea	-	Marine/Brackish	Chen, X., Shazib, S. U. A., Kim, J. H., Kim, J. H., Jang, S. W., & Shin, M. K. (2015). Morphological Description and Molecular Phylogeny of Two Species of Levicoleps (Ciliophora, Prostomatida), <i>L. taehwae</i> nov. spec. and <i>L. biwae jejuensis</i> nov. subspec., collected in Korea. <i>Journal of Eukaryotic Microbiology</i> , 0, 1–10. https://doi.org/10.1111/jeu.12291
KT18435 4.1	<i>Eimeria tenella</i>	Conoidasida (Apicomplexa)	Outgroup	-	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The All-Data-Based Evolutionary Hypothesis of Ciliated Protists with a Revised Classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 1-14. https://doi.org/10.1038/srep24874
KT19263 9.1	<i>Polystichothrix monilata</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Luo, X., Gao, F., Yi, Z., Pan, Y., Al-Farraj, S. A., & Warren, A. (2017). Taxonomy and molecular phylogeny of two new brackish hypotrichous ciliates, with the establishment of a new genus (Ciliophora, Spirotrichea). <i>Zoological Journal of the Linnean Society</i> , 179(3), 475–491. https://doi.org/10.1111/zoj.12451
KT24607 6.1	<i>Arcuospathidium scalpriforme</i>	Litostomatea	Haptoria	Terrestrial	Rajter, L., & Vdácny, P. (2016). Rapid radiation, gradual extinction and parallel evolution challenge generic classification of spathidiid ciliates (Protista, Ciliophora). <i>Zoologica Scripta</i> , 45(2), 200-223. https://doi.org/10.1111/zsc.12143

KT24607 8.1	<i>Bryophyllum</i> sp	Litostomatea	Haptoria	Terrestrial	Rajter, L., & Vdacny, P. (2016). Rapid radiation, gradual extinction and parallel evolution challenge generic classification of spathidiid ciliates (Protista, Ciliophora). <i>Zoologica Scripta</i> , 45(2), 200-223. https://doi.org/10.1111/zsc.12143
KT24607 9.1	<i>Epispathidium amphoriforme</i>	Litostomatea	Haptoria	Terrestrial	Rajter, L., & Vdacny, P. (2016). Rapid radiation, gradual extinction and parallel evolution challenge generic classification of spathidiid ciliates (Protista, Ciliophora). <i>Zoologica Scripta</i> , 45(2), 200-223. https://doi.org/10.1111/zsc.12143
KT24608 4.1	<i>Loxophyllum helus</i>	Litostomatea	Haptoria	Freshwater	Rajter, L., & Vdacny, P. (2016). Rapid radiation, gradual extinction and parallel evolution challenge generic classification of spathidiid ciliates (Protista, Ciliophora). <i>Zoologica Scripta</i> , 45(2), 200-223. https://doi.org/10.1111/zsc.12143
KT24608 5.1	<i>Pseudoholophrya terricola</i>	Litostomatea	Haptoria	Terrestrial	Rajter, L., & Vdacny, P. (2016). Rapid radiation, gradual extinction and parallel evolution challenge generic classification of spathidiid ciliates (Protista, Ciliophora). <i>Zoologica Scripta</i> , 45(2), 200-223. https://doi.org/10.1111/zsc.12143
KT24608 6.1	<i>Spathidium claviforme</i>	Litostomatea	Haptoria	Terrestrial	Rajter, L., & Vdacny, P. (2016). Rapid radiation, gradual extinction and parallel evolution challenge generic classification of spathidiid ciliates (Protista, Ciliophora). <i>Zoologica Scripta</i> , 45(2), 200-223. https://doi.org/10.1111/zsc.12143
KT24608 8.1	<i>Spathidium muscicola</i>	Litostomatea	Haptoria	Terrestrial	Rajter, L., & Vdacny, P. (2016). Rapid radiation, gradual extinction and parallel evolution challenge generic classification of spathidiid ciliates (Protista, Ciliophora). <i>Zoologica Scripta</i> , 45(2), 200-223. https://doi.org/10.1111/zsc.12143
KT24609 0.1	<i>Spathidium simplinucleatum</i>	Litostomatea	Haptoria	Terrestrial	Rajter, L., & Vdacny, P. (2016). Rapid radiation, gradual extinction and parallel evolution challenge generic classification of spathidiid ciliates (Protista, Ciliophora). <i>Zoologica Scripta</i> , 45(2), 200-223. https://doi.org/10.1111/zsc.12143
KT24798 9.1	<i>Nyctotheroides hubeiensis</i>	Armophorea	-	Symbiosis	Li, M., Sun, Z. Y., Grim, J. N., Ponce-Gordo, F., Wang, G. T., Zou, H., Li, W. X., & Wu, S. G. (2016). Morphology of <i>Nyctotheroides hubeiensis</i> Li et al. 1998 from Frog Hosts with Molecular Phylogenetic Study of Clevelandellid Ciliates (Armophorea, Clevelandellida). <i>The Journal of Eukaryotic Microbiology</i> , 63(6), 751–759. https://doi.org/10.1111/jeu.12322
KT35850 2.1	<i>Epistylis portoalegrensis</i>	Oligohymenophorea	Peritrichia	Freshwater	Kühner, S., Simão, T. L., Safi, L. S., Gazulha, F. B., Eizirik, E., & Utz, L. R. (2016). <i>Epistylis portoalegrensis</i> n. sp. (Ciliophora, Peritrichia): A New Freshwater Ciliate Species from Southern Brazil. <i>The Journal of Eukaryotic Microbiology</i> , 63(1), 93–99. https://doi.org/10.1111/jeu.12252
KT36166 0.1	<i>Trachelolophos quadrinucleatus</i>	Karyorelictea	-	Marine/Brackish	Yan, Y., Xu, Y., Al-Farraj, S.A., Al-Rasheid, K.A.S., & Song, W. (2016). Two New Ciliates and Evolution of Trachelocercids. <i>Zoological Journal of the Linnean Society</i> , 177, 306-319. https://doi.org/10.1111/zoj.12364
KT36166 1.1	<i>Tracheloraphis similis</i>	Karyorelictea	-	Marine/Brackish	Yan, Y., Xu, Y., Al-Farraj, S.A., Al-Rasheid, K.A.S., & Song, W. (2016). Two New Ciliates and Evolution of Trachelocercids. <i>Zoological Journal of the Linnean Society</i> , 177, 306-319. https://doi.org/10.1111/zoj.12364

KT46193 2.1	<i>Chlamydodon rectus</i>	Phylopharyng ea	Cyrtophoria	Marine/Brac kish	Pan, H., Jiang, J., J., Fan, X., Al-Farraj, S. A., & Gao, S. (2017). Phylogeny and taxonomy of five poorly known species of cyrtophorian ciliates (Protozoa: Ciliophora: Phylopharyngea) from China Seas. <i>Zoological Journal of the Linnean Society</i> , 180(3), 475-492. https://doi.org/10.1093/zoolinnean/zlw006
KT46193 3.1	<i>Atopochilodon distichum</i>	Phylopharyng ea	Phylopharyng gia	Marine/Brac kish	Pan, H., Jiang, J., J., Fan, X., Al-Farraj, S. A., & Gao, S. (2017). Phylogeny and taxonomy of five poorly known species of cyrtophorian ciliates (Protozoa: Ciliophora: Phylopharyngea) from China Seas. <i>Zoological Journal of the Linnean Society</i> , 180(3), 475-492. https://doi.org/10.1093/zoolinnean/zlw006
KT72301 1.1	<i>Urosomoida sejongensis</i>	Spirotrichea	Stichotrichia	Freshwater	Jung, J.-H., Baek, Y.-S., Kim, S., & Choi, H.-G. (2016). Morphology and molecular phylogeny of a new freshwater ciliate <i>Urosomoida sejongensis</i> n. sp. (Ciliophora, Sporadotrichida, Oxytrichidae) from King George Island, Antarctica. <i>Zootaxa</i> , 4072(2), 254-262. http://doi.org/10.11646/zootaxa.4072.2.7
KT72420 1.1	<i>Uroleptus stueberii</i>	Spirotrichea	Stichotrichia	Terrestrial	Berger, H. (2006). Monograph of the Urostyloidea (Ciliophora, Hypotricha). <i>Monographiae Biologicae</i> , 85, i-xvi, 1-1304. doi: 10.1007/1-4020-5273-1
KT79292 6.1	<i>Eutintinnus perminutus</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Grattepanche, J. D., Katz, L. A., & McManus, G. B. (2016). Patterns and processes in microbial biogeography: do molecules and morphologies give the same answers?. <i>The ISME Journal</i> , 10(7), 1779-1790. https://doi.org/10.1038/ismej.2015.224
KT79292 7.2	<i>Stenosemella steini</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Grattepanche, J. D., Katz, L. A., & McManus, G. B. (2016). Patterns and processes in microbial biogeography: do molecules and morphologies give the same answers?. <i>The ISME Journal</i> , 10(7), 1779-1790. https://doi.org/10.1038/ismej.2015.224
KT79292 9.1	<i>Dictyocysta lepida</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Grattepanche, J. D., Katz, L. A., & McManus, G. B. (2016). Patterns and processes in microbial biogeography: do molecules and morphologies give the same answers?. <i>The ISME Journal</i> , 10(7), 1779-1790. https://doi.org/10.1038/ismej.2015.224
KT79293 1.1	<i>Undella subcaudata</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Grattepanche, J. D., Katz, L. A., & McManus, G. B. (2016). Patterns and processes in microbial biogeography: do molecules and morphologies give the same answers?. <i>The ISME Journal</i> , 10(7), 1779-1790. https://doi.org/10.1038/ismej.2015.224
KT79293 2.1	<i>Rhabdonella spiralis</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Grattepanche, J. D., Katz, L. A., & McManus, G. B. (2016). Patterns and processes in microbial biogeography: do molecules and morphologies give the same answers?. <i>The ISME Journal</i> , 10(7), 1779-1790. https://doi.org/10.1038/ismej.2015.224
KT79293 3.1	<i>Xystonella longicauda</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Grattepanche, J. D., Katz, L. A., & McManus, G. B. (2016). Patterns and processes in microbial biogeography: do molecules and morphologies give the same answers?. <i>The ISME Journal</i> , 10(7), 1779-1790. https://doi.org/10.1038/ismej.2015.224

KT89273 1.1	<i>Australothrix xianiensi</i>	Spirotrichea	-	Terrestrial	Lyu, Z., Li, J., Qi, S., Yu, Y., & Shao, C. (2018). Morphology and morphogenesis of a new soil urostyle ciliate, <i>Australothrix xianiensis</i> nov. spec. (Ciliophora, Hypotrichia). <i>European Journal of Protistology</i> , 64, 72–81. https://doi.org/10.1016/j.ejop.2018.04.001
KT95699 8.1	<i>Cothurnia salina</i>	Oligohymenophorea	Peritrichia	Marine/Brackish	Zhuang, Y., Clamp, J. C., Yi, Z., & Ji, D. (2016). A new Peritrich Ciliate from a Hypersaline Habitat in Northern China. <i>Zootaxa</i> , 4169(1), 179–186. https://doi.org/10.11646/zootaxa.4169.1.10
KU17562 4.1	<i>Anteholosticha rectangula</i>	Spirotrichea	Hypotrichia	Terrestrial	Jung, J.-H., Park, K.-M., & Min, G.-S. (2016). Morphology and Molecular Phylogeny of the Soil Ciliate <i>Anteholosticha rectangula</i> sp. nov. from King George Island, Maritime Antarctica. <i>Acta Protozoologica</i> , 55, 89-99.
KU23452 4.1	<i>Anteholosticha randani</i>	Spirotrichea	Stichotrichia	Freshwater	Fan, Y., Lu, X., Huang, J., Hu, X., & Warren, A. (2016). Redescription of two little-known urostyle ciliates, <i>Anteholosticha randani</i> (Grolière, 1975) Berger, 2003 and <i>A. antecirrata</i> Berger, 2006 (Ciliophora, Urostyleida). <i>European Journal of Protistology</i> , 53, 96–108. http://dx.doi.org/10.1016/j.ejop.2016.01.001
KU23452 5.1	<i>Anteholosticha antecirrata</i>	Spirotrichea	Hypotrichia	Freshwater	Fan, Y., Lu, X., Huang, J., Hu, X., & Warren, A. (2016). Redescription of two little-known urostyle ciliates, <i>Anteholosticha randani</i> (Grolière, 1975) Berger, 2003 and <i>A. antecirrata</i> Berger, 2006 (Ciliophora, Urostyleida). <i>European Journal of Protistology</i> , 53, 96–108. http://dx.doi.org/10.1016/j.ejop.2016.01.001
KU50062 0.1	<i>Protocruzia tuzeti</i>	Protocruzidea	Protocruziida	Marine/Brackish	Jiang, J., Huang, J., Al-Farraj, S. A., Lin, X., & Hu, X. (2016). Morphology and Molecular Phylogeny of Two Poorly Known Species of <i>Protocruzia</i> (Ciliophora: Protocruziida). <i>Journal of Eukaryotic Microbiology</i> , 64(2), 144-152. https://doi.org/10.1111/jeu.12344
KU52221 6.1	<i>Apoamphisiella vernalis</i>	Spirotrichea	Stichotrichia	Freshwater	de Castro, L. A., Küppers, G. C., Fernandes, N. M., Schlegel, M., & Paiva, T. (2016). Ontogeny and Molecular Phylogeny of <i>Apoamphisiella vernalis</i> Reveal Unclear Separation between Genera <i>Apoamphisiella</i> and <i>Paraurostyla</i> (Protozoa, Ciliophora, Hypotrichia). <i>PLoS One</i> , 11(5), e0155825. https://doi.org/10.1371/journal.pone.0155825
KU52529 6.1	<i>Coleps amphacanthus</i>	Prostomatea	-	Freshwater	Kreutz M, Foissner W. 2006. The <i>Sphagnum</i> ponds of Simmelried in Germany: a biodiversity hot-spot for microscopic organisms. <i>Protozoological Monographs</i> , 3, 1-267.
KU52529 7.1	<i>Levicoleps jejuensis</i>	Armophorea	-	Freshwater	Lu, B. R., Ma, M. Z., Gao, F., Shi, Y. H., & Chen, X. R. (2016). Morphology and molecular phylogeny of two colepid species from China, <i>Coleps amphacanthus</i> Ehrenberg, 1833 and <i>Levicoleps biwae jejuensis</i> Chen et al., 2016 (Ciliophora, Prostomatida). <i>Dong wu xue yan jiu = Zoological Research</i> , 37(3), 176–185. https://doi.org/10.13918/j.issn.2095-8137.2016.3.176

KU52529 8.1	<i>Deviata rositae</i>	Spirotrichea	Stichotrichia	Terrestrial	Küppers, G. C., Lopretto, E. C., & Claps, M. C. (2007). Description of <i>Deviata rositae</i> n. sp., a New Ciliate Species (Ciliophora, Stichotrichia) from Argentina. <i>Journal of Eukaryotic Microbiology</i> , 54, 443-447. https://doi.org/10.1111/j.1550-7408.2007.00284.x
KU52574 5.1	<i>Spirostrombidium agathae</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Gao, F., Li, J., Song, W., Xu, D., Warren, A., Yi, Z., & Gao, S. (2016). Multi-gene-based phylogenetic analysis of oligotrich ciliates with emphasis on two dominant groups: Cyrtostrombidiids and strombidiids (Protozoa, Ciliophora). <i>Molecular Phylogenetics and Evolution</i> , 105, 241–250. https://doi.org/10.1016/j.ympev.2016.08.019
KU52574 6.1	<i>Spirostrombidium apourceolare</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Gao, F., Li, J., Song, W., Xu, D., Warren, A., Yi, Z., & Gao, S. (2016). Multi-gene-based phylogenetic analysis of oligotrich ciliates with emphasis on two dominant groups: Cyrtostrombidiids and strombidiids (Protozoa, Ciliophora). <i>Molecular Phylogenetics and Evolution</i> , 105, 241–250. https://doi.org/10.1016/j.ympev.2016.08.019
KU52575 0.1	<i>Omegastrombidium elegans</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Gao, F., Li, J., Song, W., Xu, D., Warren, A., Yi, Z., & Gao, S. (2018). Multi-gene-based phylogenetic analysis of oligotrich ciliates with emphasis on two dominant groups: Cyrtostrombidiids and strombidiids (Protozoa, Ciliophora). <i>Molecular Phylogenetics and Evolution</i> , 105, 241–250. http://dx.doi.org/10.1016/j.ympev.2016.08.019
KU52575 4.1	<i>Limnostrombidium viride</i>	Spirotrichea	Oligotrichia	Freshwater	Song, W., Pan, B., El-Serehy, H. A., Al-Farraj, S. A., Liu, W., & Li, L. (2020). Morphology and Molecular Phylogeny of Two Freshwater Oligotrich Ciliates (Protozoa, Ciliophora, Oligotrichia), <i>Pelagostrombidium fallax</i> (Zacharias, 1895) Krainer, 1991 and <i>Limnostrombidium viride</i> (Stein, 1867) Krainer, 1995, with Brief Notes on Stomatogenesis. <i>The Journal of Eukaryotic Microbiology</i> , 67(2), 232–244. https://doi.org/10.1111/jeu.12777
KU52575 5.1	<i>Spirotontonia grandis</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Gao, F., Li, J., Song, W., Xu, D., Warren, A., Yi, Z., & Gao, S. (2018). Multi-gene-based phylogenetic analysis of oligotrich ciliates with emphasis on two dominant groups: Cyrtostrombidiids and strombidiids (Protozoa, Ciliophora). <i>Molecular Phylogenetics and Evolution</i> , 105, 241–250. http://dx.doi.org/10.1016/j.ympev.2016.08.019
KU55539 0.1	<i>Euplotes qatarensis</i>	Spirotrichea	Euplotia	Marine/Brackish	Fotedar, R., Stoeck, T., Filker, S., Fell, J. W., Agatha, S., Al Marri, M., & Jiang, J. (2016). Description of the Halophile <i>Euplotes qatarensis</i> nov. spec. (Ciliophora, Spirotrichea, Euplotida) Isolated from the Hypersaline Khor Al-Adaid Lagoon in Qatar. <i>Journal of Eukaryotic Microbiology</i> , 63(5), 578-590. https://doi.org/10.1111/jeu.12305

KU58840 4.1	<i>Urosomoida paragilliformis</i>	Spirotrichea	Stichotrichia	Terrestrial	Wang, J., Lyu, Z., Warren, A., Wang, F., & Shao, C. (2016). Morphology, ontogeny and molecular phylogeny of a novel saline soil ciliate, <i>Urosomoida paragilliformis</i> n. sp. (Ciliophora, Hypotrichia). <i>European Journal of Protistology</i> , 56, 79–89. https://doi.org/10.1016/j.ejop.2016.07.005
KU58841 7.1	<i>Chilodochona carcini</i>	Phyllopharyng ea	Chonotrichia	Symbiosis	Lynn D. H. (2016). The small subunit rRNA gene sequence of the chonotrich <i>Chilodochona carcini</i> Jankowski, 1973 confirms chonotrichs as a dysteriid-derived clade (Phyllopharyngea, Ciliophora). <i>International Journal of Systematic & Evolutionary Microbiology</i> , 66(8), 2959–2964. https://doi.org/10.1099/ijsem.0.001127
KU59463 8.1	<i>Gonostomum affine</i>	Spirotrichea	Stichotrichia	Terrestrial	Huang, J., Luo, X., Bourland, W. A., Gao, F., & Gao, S. (2016). Multigene-based phylogeny of the ciliate families Amphiseliellidae and Trachelostylidae (Protozoa: Ciliophora: Hypotrichia). <i>Molecular Phylogenetics and Evolution</i> , 101, 101–110. http://dx.doi.org/10.1016/j.ympev.2016.05.007
KU66390 2.1	<i>Pseudokeronopsi s pararubra</i>	Spirotrichea	Stichotrichia	Marine/Brac kish	Li, J., Zhan, Z., & Xu, K. (2017). Systematics and Molecular Phylogeny of the Ciliate Genus <i>Pseudokeronopsis</i> (Ciliophora, Hypotrichia). <i>Journal of Eukaryotic Microbiology</i> , 64, 850–872. https://doi.org/10.1111/jeu.12420
KU71575 9.1	<i>Eutintinnus apertus</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Zhang, Q., Agatha, S., Zhang, W., Dong, J., Yu, Y., Jiao, N., & Gong, J. (2017). Three rDNA Loci-Based Phylogenies of Tintinnid Ciliates (Ciliophora, Spirotrichea, Choreotrichida). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 226–241. https://doi.org/10.1111/jeu.12354
KU71576 0.1	<i>Favella panamensis</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Agatha, S., & Struder-Kypke, M. C. (2012). Reconciling Cladistic and Genetic Analyses in Choreotrichid Ciliates (Ciliophora, Spirotricha, Oligotrichia). <i>Journal of Eukaryotic Microbiology</i> , 0(0), 1–26. https://doi.org/10.1111/j.1550-7408.2012.00623.x
KU71576 1.1	<i>Leprotintinnus nordqvisti</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Zhang, Q., Agatha, S., Zhang, W., Dong, J., Yu, Y., Jiao, N., & Gong, J. (2017). Three rDNA Loci-Based Phylogenies of Tintinnid Ciliates (Ciliophora, Spirotrichea, Choreotrichida). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 226–241. https://doi.org/10.1111/jeu.12354
KU71576 2.1	<i>Rhizodomus tagatzi</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Zhang, Q., Agatha, S., Zhang, W., Dong, J., Yu, Y., Jiao, N., & Gong, J. (2017). Three rDNA Loci-Based Phylogenies of Tintinnid Ciliates (Ciliophora, Spirotrichea, Choreotrichida). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 226–241. https://doi.org/10.1111/jeu.12354
KU71576 4.1	<i>Stenosemella ventricosa</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Zhang, Q., Agatha, S., Zhang, W., Dong, J., Yu, Y., Jiao, N., & Gong, J. (2017). Three rDNA Loci-Based Phylogenies of Tintinnid Ciliates (Ciliophora, Spirotrichea, Choreotrichida). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 226–241. https://doi.org/10.1111/jeu.12354

KU71576 5.1	<i>Schmidingerella quequenensis</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Zhang, Q., Agatha, S., Zhang, W., Dong, J., Yu, Y., Jiao, N., & Gong, J. (2017). Three rDNA Loci-Based Phylogenies of Tintinnid Ciliates (Ciliophora, Spirotrichea, Choreotrichida). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 226–241. https://doi.org/10.1111/jeu.12354
KU71576 6.1	<i>Tintinnidium primitivu</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Zhang, Q., Agatha, S., Zhang, W., Dong, J., Yu, Y., Jiao, N., & Gong, J. (2017). Three rDNA Loci-Based Phylogenies of Tintinnid Ciliates (Ciliophora, Spirotrichea, Choreotrichida). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 226–241. https://doi.org/10.1111/jeu.12354
KU71576 7.1	<i>Tintinnidium mucicola</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Zhang, Q., Agatha, S., Zhang, W., Dong, J., Yu, Y., Jiao, N., & Gong, J. (2017). Three rDNA Loci-Based Phylogenies of Tintinnid Ciliates (Ciliophora, Spirotrichea, Choreotrichida). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 226–241. https://doi.org/10.1111/jeu.12354
KU71576 8.1	<i>Tintinnopsis brasiliensis</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Zhang, Q., Agatha, S., Zhang, W., Dong, J., Yu, Y., Jiao, N., & Gong, J. (2017). Three rDNA Loci-Based Phylogenies of Tintinnid Ciliates (Ciliophora, Spirotrichea, Choreotrichida). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 226–241. https://doi.org/10.1111/jeu.12354
KU71576 9.1	<i>Tintinnopsis cylindrica</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Zhang, Q., Agatha, S., Zhang, W., Dong, J., Yu, Y., Jiao, N., & Gong, J. (2017). Three rDNA Loci-Based Phylogenies of Tintinnid Ciliates (Ciliophora, Spirotrichea, Choreotrichida). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 226–241. https://doi.org/10.1111/jeu.12354
KU71577 0.1	<i>Tintinnopsis fistularis</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Zhang, Q., Agatha, S., Zhang, W., Dong, J., Yu, Y., Jiao, N., & Gong, J. (2017). Three rDNA Loci-Based Phylogenies of Tintinnid Ciliates (Ciliophora, Spirotrichea, Choreotrichida). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 226–241. https://doi.org/10.1111/jeu.12354
KU71577 1.1	<i>Tintinnopsis parvula</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Zhang, Q., Agatha, S., Zhang, W., Dong, J., Yu, Y., Jiao, N., & Gong, J. (2017). Three rDNA Loci-Based Phylogenies of Tintinnid Ciliates (Ciliophora, Spirotrichea, Choreotrichida). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 226–241. https://doi.org/10.1111/jeu.12354
KU71577 3.1	<i>Tintinnopsis radix</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Zhang, Q., Agatha, S., Zhang, W., Dong, J., Yu, Y., Jiao, N., & Gong, J. (2017). Three rDNA Loci-Based Phylogenies of Tintinnid Ciliates (Ciliophora, Spirotrichea, Choreotrichida). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 226–241. https://doi.org/10.1111/jeu.12354
KU71577 6.1	<i>Tintinnopsis ventricosoides</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Zhang, Q., Agatha, S., Zhang, W., Dong, J., Yu, Y., Jiao, N., & Gong, J. (2017). Three rDNA Loci-Based Phylogenies of Tintinnid Ciliates (Ciliophora, Spirotrichea, Choreotrichida). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 226–241. https://doi.org/10.1111/jeu.12354
KU71598 2.1	<i>Paraurostyla coronata</i>	Spirotrichea	Stichotrichia	Freshwater	Arora, S., Gupta, R., Kamra, K., & Sapra, G. R. (1999). Characterization of <i>Paraurostyla coronata</i> sp. n. Including a Comparative Account of Other Members of the Genus. <i>Acta Protozoologica</i> , 38, 133-144.

KU72030 4.1	<i>Miamiensis avidus</i>	Oligohymenophorea	Scuticociliata	Symbiosis	Tao, Z., Liu, L., Chen, X., Zhou, S., & Wang, G. (2016). First isolation of <i>Miamiensis avidus</i> (Ciliophora: Scuticociliatida) associated with skin ulcers from reared pharaoh cuttlefish <i>Sepia pharaonis</i> . <i>Diseases of Aquatic Organisms</i> , 122(1), 67–71. https://doi.org/10.3354/dao03067
KU87045 9.1	<i>Zoothamnium zhanjiangense</i>	Oligohymenophorea	Peritrichia	Marine/Brackish	Shen, Z., Ji, D., Yi, Z., Al-Rasheid, K. A., & Lin, X. (2017). Morphology and Phylogenetic Placement of Three New <i>Zoothamnium</i> species (Ciliophora: Peritrichia) from Coastal Waters of Southern China. <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 266–277. https://doi.org/10.1111/jeu.12358
KU87046 0.1	<i>Zoothamnium bucciniiformum</i>	Oligohymenophorea	Peritrichia	Marine/Brackish	Shen, Z., Ji, D., Yi, Z., Al-Rasheid, K. A., & Lin, X. (2017). Morphology and Phylogenetic Placement of Three New <i>Zoothamnium</i> species (Ciliophora: Peritrichia) from Coastal Waters of Southern China. <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 266–277. https://doi.org/10.1111/jeu.12358
KU87046 1.1	<i>Zoothamnium florens</i>	Oligohymenophorea	Peritrichia	Marine/Brackish	Shen, Z., Ji, D., Yi, Z., Al-Rasheid, K. A., & Lin, X. (2017). Morphology and Phylogenetic Placement of Three New <i>Zoothamnium</i> species (Ciliophora: Peritrichia) from Coastal Waters of Southern China. <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 266–277. https://doi.org/10.1111/jeu.12358
KX01059 9.1	<i>Nyctotheroides pyriformis</i>	Armophorea	-	Symbiosis	Li, M., Li, C., Grim, J. N., Ponce-Gordo, F., Wang, G., Zou, H., Li, W., & Wu, S. (2017). Supplemental description of <i>Nyctotheroides pyriformis</i> n. comb. (= <i>Macrocytopharynx pyriformis</i> (Nie, 1932) Li et al. 2002) from frog hosts with consideration of the validity of the genus <i>Macrocytopharynx</i> (Armophorea, Clevelandellida). <i>European Journal of Protistology</i> , 58, 152–163. https://doi.org/10.1016/j.ejop.2016.10.002
KX11951 8.1	<i>Spirostomum yaguii</i>	Heterotrichea	-	Marine/Brackish	Chen, X., Kim, J. H., Shazib, S. U. A., Kwon, C. B., & Shin, M. K. (2017). Morphology and molecular phylogeny of three heterotrichid species (Ciliophora, Heterotrichea), including a new species of <i>Anigsteinia</i> . <i>European Journal of Protistology</i> , 61, A, 278–293. https://doi.org/10.1016/j.ejop.2017.06.005
KX11952 2.1	<i>Blepharisma bimicronucleatum</i>	Heterotrichea	-	Terrestrial	Chen, X., Kim, J. H., Shazib, S. U. A., Kwon, C. B., & Shin, M. K. (2017). Morphology and molecular phylogeny of three heterotrichid species (Ciliophora, Heterotrichea), including a new species of <i>Anigsteinia</i> . <i>European Journal of Protistology</i> , 61, A, 278–293. https://doi.org/10.1016/j.ejop.2017.06.005
KX13115 3.1	<i>Strombidium intermedium</i>	Spirotrichea	Oligotrichia	-	-
KX13864 5.1	<i>Anteholosticha multicirrata</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Park, K. M., Jung, J. H., & Min, G. S. (2013). Morphology, morphogenesis, and molecular phylogeny of <i>Anteholosticha multicirrata</i> n. sp. (Ciliophora, Spirotrichea) with a note on morphogenesis of <i>A. pulchra</i> (Kahl, 1932) Berger, 2003. <i>The Journal of Eukaryotic Microbiology</i> , 60(6), 564–577. https://doi.org/10.1111/jeu.12060

KX13865 4.1	<i>Pseudocyrtohymena koreana</i>	Spirotrichea	-	Marine/Brackish	Jung, J. H., Park, K. M., & Min, G. S. (2015). Morphology and Molecular Phylogeny of <i>Pseudocyrtohymena koreana</i> n. g., n. sp. and Antarctic <i>Neokeronopsis asiatica</i> Foissner et al., 2010 (Ciliophora, Sporadotrichida), with a Brief Discussion of the <i>Cyrtohymena</i> Undulating Membranes Pattern. <i>Journal of Eukaryotic Microbiology</i> , 62(3), 280-297. https://doi.org/10.1111/jeu.12179
KX13865 6.1	<i>Thigmokeronopsis rubra</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Berger, H. (2006). Monograph of the Urostyloidea (Ciliophora, Hypotricha). <i>Monographiae Biologicae</i> , 85, i-xvi, 1-1304. doi:10.1007/1-4020-5273-1
KX13947 0.1	<i>Pseudourostyla guizhouensis</i>	Spirotrichea	Hypotrichia	Terrestrial	Li, Y., Lyu, Z., Warren, A., Zhou, K., Li, F., & Chen, X. (2018). Morphology and Molecular Phylogeny of a New Hypotrich Ciliate, <i>Pseudourostyla guizhouensis</i> sp. nov. from Southern China, with Notes on a Chinese Population of <i>Hemicyclostyla franzi</i> (Foissner, 1987) Paiva et al., 2012 (Ciliophora, Hypotricha). <i>The Journal of Eukaryotic Microbiology</i> , 65(1), 132-142. https://doi.org/10.1111/jeu.12428
KX14728 7.1	<i>Uronychia xinjiangensis</i>	Spirotrichea	Euplotia	Marine/Brackish	Shi, X., Liu, G., Wang, C., & Hu, X. (2017). Description of a New Brackish Water Ciliate, <i>Uronychia xinjiangensis</i> n. sp. (Ciliophora, Euplotida) Based on Morphology, Morphogenesis and Molecular Phylogeny. <i>Acta Protozoologica</i> , 56, 303-315. https://doi.org/10.4467/16890027AP.17.0267828
KX21965 6.1	<i>Diplodinium anisacanthum</i>	Litostomatea	Trichostomatia	Symbiosis	Cedrola, F., Senra, M. V., D'Agosto, M., & Dias, R. J. (2017). Phylogenetic Analyses Support Validity of Genus <i>Eodinium</i> (Ciliophora, Entodiniomorphida, Ophryoscolecidae). <i>The Journal of Eukaryotic Microbiology</i> , 64(2), 242-247. https://doi.org/10.1111/jeu.12355
KX25819 2.1	<i>Phascalodon vorticella</i>	Phyllopharyngia	Phyllopharyngia	Freshwater	Pan, H., Wang, L., Jiang, J., & Stoeck, T. (2016). Morphology of four cyrtophorian ciliates (Protozoa, Ciliophora) from Yangtze Delta, China, with notes on the phylogeny of the genus <i>Phascalodon</i> . <i>European Journal of Protistology</i> , 56, 134-146. https://doi.org/10.1016/j.ejop.2016.08.005
KX25819 3.1	<i>Dysteria ovalis</i>	Phyllopharyngia	Cyrtophoria	Marine/Brackish	Pan, H., Wang, L., Jiang, J., & Stoeck, T. (2016). Morphology of four cyrtophorian ciliates (Protozoa, Ciliophora) from Yangtze Delta, China, with notes on the phylogeny of the genus <i>Phascalodon</i> . <i>European Journal of Protistology</i> , 56, 134-146. https://doi.org/10.1016/j.ejop.2016.08.005
KX25819 4.1	<i>Dysteria semilunaris</i>	Phyllopharyngia	Cyrtophoria	Marine/Brackish	Pan, H., Wang, L., Jiang, J., & Stoeck, T. (2016). Morphology of four cyrtophorian ciliates (Protozoa, Ciliophora) from Yangtze Delta, China, with notes on the phylogeny of the genus <i>Phascalodon</i> . <i>European Journal of Protistology</i> , 56, 134-146. https://doi.org/10.1016/j.ejop.2016.08.005
KX36449 3.1	<i>Aegyria foissneri</i>	Phyllopharyngia	Phyllopharyngia	Marine/Brackish	Qu, Z., Ma, H., Al-Farraj, S. A., Lin, X., & Hu, X. (2017). Morphology and molecular phylogeny of <i>Aegyria foissneri</i> sp. n. and <i>Lynchella minuta</i> sp. n. (Ciliophora, Cyrtophoria) from brackish waters of southern China. <i>European Journal of Protistology</i> , 57, 50-60. https://doi.org/10.1016/j.ejop.2016.10.003

KX36449 4.1	<i>Lynchella minuta</i>	Phyllopharyng ea	Phyllopharyn gia	Marine/Brac kish	Qu, Z., Ma, H., Al-Farraj, S. A., Lin, X., & Hu, X. (2017). Morphology and molecular phylogeny of <i>Aegyria foissneri</i> sp. n. and <i>Lynchella minuta</i> sp. n. (Ciliophora, Cyrtophoria) from brackish waters of southern China. <i>European Journal of Protistology</i> , 57, 50–60. https://doi.org/10.1016/j.ejop.2016.10.003
KX51665 5.1	<i>Euplotes harpa</i>	Spirotrichea	Euplotia	Marine/Brac kish	Zhao, Y., Yi, Z., Warren, A., & Song, W. (2018). Species delimitation for the widely distributed microbial eukaryote genus <i>Euplotes</i> (Alveolata, Ciliophora). <i>Proceedings of the Royal Society B</i> , 285(1871), 20172159. https://doi.org/10.1098/rspb.2017.2159
KX51666 5.1	<i>Euplotes alatus</i>	Spirotrichea	Euplotia	Marine/Brac kish	Zhao, Y., Yi, Z., Warren, A., & Song, W. (2018). Species delimitation for the widely distributed microbial eukaryote genus <i>Euplotes</i> (Alveolata, Ciliophora). <i>Proceedings of the Royal Society B</i> , 285(1871), 20172159. https://doi.org/10.1098/rspb.2017.2159
KX51669 9.1	<i>Moneuplotes minuta</i>	Spirotrichea	Euplotia	Marine/Brac kish	Foissner, W., Moon-van der Staay, S. Y., van der Staay, G. W. M., Hackstein, J. H. P., Krautgartner, W.-D., & Berger, H. (2004). Reconciling classical and molecular phylogenies in the stichotrichines (Ciliophora, Spirotrichea), including new sequences from some rare species. <i>European Journal of Protistology</i> , 40, 265–281. https://doi.org/10.1016/j.ejop.2004.05.004
KX51671 9.1	<i>Euplotes raikovi</i>	Spirotrichea	Euplotia	Marine/Brac kish	Zhao, Y., Yi, Z., Warren, A., & Song, W. (2018). Species delimitation for the widely distributed microbial eukaryote genus <i>Euplotes</i> (Alveolata, Ciliophora). <i>Proceedings of the Royal Society B</i> , 285(1871), 20172159. https://doi.org/10.1098/rspb.2017.2159
KX58124 2.1	<i>Amphileptus litorotiformis</i>	Litostomatea	Haptoria	Marine/Brac kish	Kim, S.-J., & Min, G.-S. (2016). New records of two pleurostomatids (Ciliophora: Litostomatea) from Korea. <i>Journal of Species Research</i> , 5(3), 343347. https://doi.org/10.12651/JSR.2016.5.3.343
KX58124 5.1	<i>Kentrophyllum setigerum</i>	Litostomatea	Haptoria	Marine/Brac kish	Kim, S.-J., & Min, G.-S. (2016). New records of two pleurostomatids (Ciliophora: Litostomatea) from Korea. <i>Journal of Species Research</i> , 5(3), 343347. https://doi.org/10.12651/JSR.2016.5.3.343
KX64115 0.1	<i>Lamtostyla salina</i>	Spirotrichea	Stichotrichia	Terrestrial	Dong, J., Lu, X., Shao, C., Huang, J., & Al-Rasheid, K. A. S. (2016). Morphology, morphogenesis and molecular phylogeny of a novel saline soil ciliate, <i>Lamtostyla salina</i> n. sp. (Ciliophora, Hypotricha). <i>European Journal of Protistology</i> , 56, 219-231. https://doi.org/10.1016/j.ejop.2016.09.005
KX66926 2.1	<i>Zoothamnium ignavum</i>	Oligohymenop horea	Peritrichia	Marine/Brac kish	Schuster, L., & Bright, M. (2016). A Novel Colonial Ciliate <i>Zoothamnium ignavum</i> sp. nov. (Ciliophora, Oligohymenophorea) and Its Ectosymbiont Candidatus <i>Navis piranensis</i> gen. nov., sp. nov. from Shallow-Water Wood Falls. <i>PLoS One</i> , 11(9), e0162834. https://doi.org/10.1371/journal.pone.0162834

KX76618 4.1	<i>Rigidocortex quadrinucleatus</i>	Spirotrichea	Stichotrichia	Terrestrial	Bharti, D., Kumar, S., La Terza, A. (2017). Description and molecular phylogeny of a novel hypotrich ciliate from the soil of Marche Region, Italy; including notes on the MOSYSS Project. <i>Journal of Eukaryotic Microbiology</i> , 64, 678–690. doi:10.1111/jeu.12404
KX77647 7.1	<i>Brachonella contorta</i>	Armophorea	-	Freshwater	Bourland, W. A., Rotterova, J., & Čepička, I. (2017). Redescription and molecular phylogeny of the type species for two main metopid genera, <i>Metopus es</i> (Müller, 1776) Lauterborn, 1916 and <i>Brachonella contorta</i> (Levander, 1894) Jankowski, 1964 (Metopida, Ciliophora), based on broad geographic sampling, <i>European Journal of Protistology</i> , 59, 133-154. https://doi.org/10.1016/j.ejop.2016.11.002
KX88998 8.1	<i>Oxytricha chiapasensis</i>	Spirotrichea	Hypotrichia	Freshwater	Méndez-Sánchez, D., Mayén-Estrada, R., Luo, X., & Hu, X. (2018). A New Subspecies of <i>Oxytricha granulifera</i> (Hypotrichia: Oxytrichidae) from Mexico, with Notes on its Morphogenesis and Phylogenetic Position. <i>The Journal of Eukaryotic Microbiology</i> , 65(3), 357–371. https://doi.org/10.1111/jeu.12479
KX90656 8.1	<i>Synophrya sp</i>	Oligohymenophorea	-	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
KX92522 0.1	<i>Rigidohymena quadrinucleata</i>	Spirotrichea	Stichotrichia	Terrestrial	Wang, J., Li, L., Warren, A., & Shao, C. (2017). Morphogenesis and molecular phylogeny of the soil ciliate <i>Rigidohymena quadrinucleata</i> (Dragesco and Njine, 1971) Berger, 2011 (Ciliophora, Hypotricha, Oxytrichidae). <i>European Journal of Protistology</i> , 60, 1–12. https://doi.org/10.1016/j.ejop.2017.04.006
KY02556 7.1	<i>Urostomides campanula</i>	Armophorea	-	Freshwater	Bourland, W., Rotterová, J., & Cepicka, I. (2017). Morphologic and molecular characterization of seven species of the remarkably diverse and widely distributed metopid genus <i>Urostomides</i> Jankowski, 1964 (Armophorea, Ciliophora). <i>European Journal of Protistology</i> , 62, A, 194-232. https://doi.org/10.1016/j.ejop.2017.07.003
KY02556 8.1	<i>Urostomides caducus</i>	Armophorea	-	Freshwater	Bourland, W., Rotterová, J., & Cepicka, I. (2017). Morphologic and molecular characterization of seven species of the remarkably diverse and widely distributed metopid genus <i>Urostomides</i> Jankowski, 1964 (Armophorea, Ciliophora). <i>European Journal of Protistology</i> , 62, A, 194-232. https://doi.org/10.1016/j.ejop.2017.07.003
KY02556 9.1	<i>Urostomides bacillatus</i>	Armophorea	-	Freshwater	Bourland, W., Rotterová, J., & Cepicka, I. (2017). Morphologic and molecular characterization of seven species of the remarkably diverse and widely distributed metopid genus <i>Urostomides</i> Jankowski, 1964 (Armophorea, Ciliophora). <i>European Journal of Protistology</i> , 62, A, 194-232. https://doi.org/10.1016/j.ejop.2017.07.003

KY02557 0.1	<i>Urostomides darwini</i>	Armophorea	-	Freshwater	Bourland, W., Rotterová, J., & Čepička, I. (2017). Morphologic and molecular characterization of seven species of the remarkably diverse and widely distributed metopid genus <i>Urostomides</i> Jankowski, 1964 (Armophorea, Ciliophora). <i>European Journal of Protistology</i> , 61(Pt A), 194–232. https://doi.org/10.1016/j.ejop.2017.07.003
KY02558 6.1	<i>Urostomides striatus</i>	Armophorea	-	Freshwater	Bourland, W., Rotterová, J., & Cepicka, I. (2017). Morphologic and molecular characterization of seven species of the remarkably diverse and widely distributed metopid genus <i>Urostomides</i> Jankowski, 1964 (Armophorea, Ciliophora). <i>European Journal of Protistology</i> , 62, A, 194-232. https://doi.org/10.1016/j.ejop.2017.07.003
KY02558 8.1	<i>Urostomides denarius</i>	Armophorea	-	Freshwater	Bourland, W., Rotterová, J., & Čepička, I. (2017). Morphologic and molecular characterization of seven species of the remarkably diverse and widely distributed metopid genus <i>Urostomides</i> Jankowski, 1964 (Armophorea, Ciliophora). <i>European Journal of Protistology</i> , 61(Pt A), 194–232. https://doi.org/10.1016/j.ejop.2017.07.003
KY08593 4.1	<i>Schmidingerothrix elongata</i>	Spirotrichea	Hypotrichia	Terrestrial	Lu, X., Huang, J., Shao, C., & Berger, H. (2018). Morphology, cell-division, and phylogeny of <i>Schmidingerothrix elongata</i> spec. nov. (Ciliophora, Hypotricha), and brief guide to hypotrichs with <i>Gonostomum</i> -like oral apparatus. <i>European Journal of Protistology</i> , 62, 24–42. https://doi.org/10.1016/j.ejop.2017.11.001
KY17637 8.1	<i>Birojimia soyaensis</i>	Spirotrichea	Stichotrichia	Terrestrial	Kim, K., Jung, J., Min, G. (2016). A New Soil Ciliate, <i>Birojimia soyaensis</i> nov. spec. (Ciliophora: Urostylella) from South Korea. <i>Acta Protozoologica</i> , 135-144. https://doi.org/10.4467/16890027AP.16.013.5745
KY23118 7.1	<i>Holostichides heterotypicus</i>	Spirotrichea	Stichotrichia	Terrestrial	Kim, K. S., Jung, J. H., & Min, G. S. (2017). Morphology and Molecular Phylogeny of Two New Ciliates, <i>Holostichides heterotypicus</i> n. sp. and <i>Holosticha muuiensis</i> n. sp. (Ciliophora: Urostylella). <i>The Journal of Eukaryotic Microbiology</i> , 64(6), 873–884. https://doi.org/10.1111/jeu.12421
KY23118 8.1	<i>Holosticha muuiensis</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Kim, K. S., Jung, J. H., & Min, G. S. (2017). Morphology and Molecular Phylogeny of Two New Ciliates, <i>Holostichides heterotypicus</i> n. sp. and <i>Holosticha muuiensis</i> n. sp. (Ciliophora: Urostylella). <i>The Journal of Eukaryotic Microbiology</i> , 64(6), 873–884. https://doi.org/10.1111/jeu.12421
KY29031 3.1	<i>Leegaardiella sp</i>	Spirotrichea	-	Marine/Brackish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY29031 5.1	<i>Ascampbelliella acuta</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010

KY29031 6.1	<i>Cyttarocylis acutiformis</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY29031 7.1	<i>Petalotricha ampulla</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY29031 8.1	<i>Dictyocysta elegans</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY29031 9.1	<i>Epiplocylis undella</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY29032 0.1	<i>Eutintinnus medius</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY29032 1.1	<i>Ptychocylis minor</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY29032 3.1	<i>Protorhabdonella simplex</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY29032 4.1	<i>Amphorides minor</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics & Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY29032 5.1	<i>Salpingacantha undata</i>	Spirotrichea	Choreotrichi a	Marine/Brac kish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010

KY29032 6.1	<i>Salpingacantha unguiculata</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY29032 7.1	<i>Parundella aculeata</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY29032 8.1	<i>Parafavella parumdentata</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY29032 9.1	<i>Xystonella acus</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY29033 0.1	<i>Climacocylis scalaroides</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Santoferrara, L. F., Alder, V. V., & McManus, G. B. (2017). Phylogeny, classification and diversity of Choreotrichia and Oligotrichia (Ciliophora, Spirotrichea). <i>Molecular Phylogenetics and Evolution</i> , 112, 12-22. https://doi.org/10.1016/j.ympev.2017.03.010
KY31362 3.1	<i>Pseudokeronopsis songi</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Li, J., Zhan, Z., & Xu, K. (2017). Systematics and Molecular Phylogeny of the Ciliate Genus <i>Pseudokeronopsis</i> (Ciliophora, Hypotrichia). <i>The Journal of Eukaryotic Microbiology</i> , 64(6), 850–872. https://doi.org/10.1111/jeu.12420
KY35379 9.1	<i>Stylonychia nodulinucleata</i>	Spirotrichea	Hypotrichia	Terrestrial	Kumar, S., & Foissner, W. (2017). Morphology and ontogenesis of <i>Stylonychia (Metastylonychia) nodulinucleata</i> nov. subgen. (Ciliophora, Hypotrichia) from Australia. <i>European Journal of Protistology</i> , 57, 61–72. http://dx.doi.org/10.1016/j.ejop.2016.09.001
KY43295 7.1	<i>Metopus contortus</i>	Armophorea	-	Marine/Brackish	Omar, A., Zhang, Q., Zou, S., & Gong, J. (2017). Morphology and Phylogeny of the Soil Ciliate <i>Metopus yantaiensis</i> n. sp. (Ciliophora, Metopida), with Identification of the Intracellular Bacteria. <i>The Journal of Eukaryotic Microbiology</i> , 64(6), 792–805. https://doi.org/10.1111/jeu.12411
KY43295 9.1	<i>Metopus yantaiensis</i>	Armophorea	-	Terrestrial	Omar, A., Zhang, Q., Zou, S., & Gong, J. (2017). Morphology and Phylogeny of the Soil Ciliate <i>Metopus yantaiensis</i> n. sp. (Ciliophora, Metopida), with Identification of the Intracellular Bacteria. <i>The Journal of Eukaryotic Microbiology</i> , 64(6), 792–805. https://doi.org/10.1111/jeu.12411
KY43589 9.1	<i>Vorticella convallaria</i>	Oligohymenophorea	Peritrichia	Freshwater	Dunthorn, M., Stoeck, T., Wolf, K., Breiner, H.-W., & Foissner, W. (2012). Diversity and endemism of ciliates inhabiting Neotropical phytotelmata. <i>Systematics and Biodiversity</i> , 10(2), 1–11. https://doi.org/10.1080/14772000.2012.685

KY44824 3.1	<i>Metasterkiella koreana</i>	Spirotrichea	-	Terrestrial	Kumar, S., Bharti, D., Shazib, S., & Shin, M. K. (2017). Discovery of a new hypotrich ciliate from petroleum contaminated soil. <i>PloS One</i> , 12(6), e0178657. https://doi.org/10.1371/journal.pone.0178657
KY45172 8.1	<i>Paragonostomoides xianicum</i>	Spirotrichea	Stichotrichia	Terrestrial	Wang, J., Ma, J., Qi, S., & Shao, C. (2017). Morphology, morphogenesis and molecular phylogeny of a new soil ciliate <i>Paragonostomoides xianicum</i> n. sp. (Ciliophora, Hypotrichia, Gonostomatidae). <i>European journal of protistology</i> , 61(Pt A), 233–243. https://doi.org/10.1016/j.ejop.2017.07.001
KY47561 4.1	<i>Gonostomum sinicum</i>	Spirotrichea	Stichotrichia	Terrestrial	Lu, X., Huang, J., Shao, C., Al-Farraj, S. A., & Gao, S. (2017). Morphology and Morphogenesis of a Novel Saline Soil Hypotrichous Ciliate, <i>Gonostomum sinicum</i> nov. spec. (Ciliophora, Hypotrichia, Gonostomatidae), Including a Report on the Small Subunit rDNA Sequence. <i>The Journal of Eukaryotic Microbiology</i> , 64(5), 632–646. https://doi.org/10.1111/jeu.12398
KY47631 3.1	<i>Cyclidium glaucoma</i>	Oligohymenophorea	-	Freshwater	Guggiari, M., & Peck, R. (2008). The bacterivorous ciliate <i>Cyclidium glaucoma</i> isolated from a sewage treatment plant: Molecular and cytological descriptions for barcoding. <i>European Journal of Protistology</i> , 44(3), 168–180. https://doi.org/10.1016/j.ejop.2007.11.004
KY47631 4.1	<i>Chilodonella uncinata</i>	Phyllopharyngia	Phyllopharyngia	Symbiosis	Bu, X., Wang, R., Gomes, G. B., Ban, S., Li, W., Wu, S., Zou, H., Li, M., & Wang, G. (2021). First record of facultative parasitism of <i>Chilodonella uncinata</i> based on goldfish (<i>Carassius auratus</i>) infection model. <i>Aquaculture</i> , 538, 736535. https://doi.org/10.1016/j.aquaculture.2021.736535
KY49251 6.1	<i>Keronopsis helluo</i>	Spirotrichea	Stichotrichia	Terrestrial	Park, K. M., Chae, N., Jung, J. H., Min, G. S., Kim, S., & Berger, H. (2017). Redescription of <i>Keronopsis helluo</i> Penard, 1922 from Antarctica and <i>Paraholosticha pannonica</i> Gellért and Tamás, 1959 from Alaska (Ciliophora, Hypotrichia). <i>European Journal of Protistology</i> , 60, 102–118. https://doi.org/10.1016/j.ejop.2017.04.008
KY49251 7.1	<i>Paraholosticha pannonica</i>	Spirotrichea	Stichotrichia	Terrestrial	Park, K. M., Chae, N., Jung, J. H., Min, G. S., Kim, S., & Berger, H. (2017). Redescription of <i>Keronopsis helluo</i> Penard, 1922 from Antarctica and <i>Paraholosticha pannonica</i> Gellért and Tamás, 1959 from Alaska (Ciliophora, Hypotrichia). <i>European Journal of Protistology</i> , 60, 102–118. https://doi.org/10.1016/j.ejop.2017.04.008
KY49662 0.1	<i>Chlamydonon oligochaetus</i>	Phyllopharyngia	Cyrtophoria	Marine/Brackish	Qu, Z., Pan, H., Lin, X., Li, L., Aleidan, A., Al-Farraj, S. A., Stoeck, T., & Hu, X. (2018). A Contribution to the Morphology and Phylogeny of <i>Chlamydonon</i> , with Three New Species from China (Ciliophora, Cyrtophoria). <i>The Journal of Eukaryotic Microbiology</i> , 65(2), 236–249. https://doi.org/10.1111/jeu.12472

KY49662 1.1	<i>Chlamydomon similis</i>	Phylopharyng ea	Cyrtophoria	Marine/Brac kish	Qu, Z., Pan, H., Lin, X., Li, L., Aleidan, A., Al-Farraj, S. A., Stoeck, T., & Hu, X. (2018). A Contribution to the Morphology and Phylogeny of Chlamydomon, with Three New Species from China (Ciliophora, Cyrtophoria). <i>The Journal of Eukaryotic Microbiology</i> , 65(2), 236–249. https://doi.org/10.1111/jeu.12472
KY55664 2.1	<i>Spathidium securiforme</i>	Litostomatea	Haptoria	Terrestrial	Jang, S. W., Vdacny, P., Shazib, S.U. A., & Shin, M. K. (2017). Linking morphology and molecules: integrative taxonomy of spathidiids (Protista: Ciliophora: Litostomatea) from Korea. <i>Journal of Natural History</i> , 51(17-18), 939-974. https://doi.org/10.1080/00222933.2017.1319520
KY55664 3.1	<i>Spathidium ascendens</i>	Litostomatea	Haptoria	Terrestrial	Jang, S. W., Vdacny, P., Shazib, S.U. A., & Shin, M. K. (2017). Linking morphology and molecules: integrative taxonomy of spathidiids (Protista: Ciliophora: Litostomatea) from Korea. <i>Journal of Natural History</i> , 51(17-18), 939-974. https://doi.org/10.1080/00222933.2017.1319520
KY55664 7.1	<i>Spathidium polynucleatum</i>	Litostomatea	Haptoria	Terrestrial	Jang, S. W., Vdacny, P., Shazib, S.U. A., & Shin, M. K. (2017). Linking morphology and molecules: integrative taxonomy of spathidiids (Protista: Ciliophora: Litostomatea) from Korea. <i>Journal of Natural History</i> , 51(17-18), 939-974. https://doi.org/10.1080/00222933.2017.1319520
KY55664 8.1	<i>Enchelys megaspinata</i>	Litostomatea	Haptoria	Terrestrial	Jang, S. W., Vdačný, P., Shazib, S. U. A., & Shin, M. K. (2017). Linking morphology and molecules: integrative taxonomy of spathidiids (Protista: Ciliophora: Litostomatea) from Korea. <i>Journal of Natural History</i> , 51(17-18), 939-974. https://doi.org/10.1080/00222933.2017.1319520
KY56372 1.1	<i>Plagiopyla narasimhamurti</i>	Plagiopylea	-	Freshwater	Nitla, V., Serra, V., Fokin, S. I., Modeo, L., Verni, F., Sandeep, B. V., Kalavati, C., & Petroni, G. (2019). Critical revision of the family Plagiopylidae (Ciliophora: Plagiopylea), including the description of two novel species, <i>Plagiopyla ramani</i> and <i>Plagiopyla narasimhamurtii</i> , and redescription of <i>Plagiopyla nasuta</i> Stein, 1860 from India. <i>Zoological Journal of the Linnean Society</i> , 186(1), 1–45. https://doi.org/10.1093/zoolinnean/zly041
KY59476 5.1	<i>Vorticella paralim</i>	Oligohymenop horea	Peritrichia	Marine/Brac kish	Liang, Z., Shen, Z., Zhang, Y., Ji, D., Li, J., Warren, A., & Lin, X. (2019). Morphology and Phylogeny of Four New Vorticella Species (Ciliophora: Peritrichia) from Coastal Waters of Southern China. <i>The Journal of Eukaryotic Microbiology</i> , 66(2), 267–280. https://doi.org/10.1111/jeu.12668
KY59476 6.1	<i>Vorticella sphaeroidali</i>	Oligohymenop horea	Peritrichia	Marine/Brac kish	Liang, Z., Shen, Z., Zhang, Y., Ji, D., Li, J., Warren, A., & Lin, X. (2019). Morphology and Phylogeny of Four New Vorticella Species (Ciliophora: Peritrichia) from Coastal Waters of Southern China. <i>The Journal of Eukaryotic Microbiology</i> , 66(2), 267–280. https://doi.org/10.1111/jeu.12668
KY59476 7.1	<i>Vorticella parachiang</i>	Oligohymenop horea	Peritrichia	Marine/Brac kish	Liang, Z., Shen, Z., Zhang, Y., Ji, D., Li, J., Warren, A., & Lin, X. (2019). Morphology and Phylogeny of Four New Vorticella Species (Ciliophora: Peritrichia) from Coastal Waters of Southern China. <i>The Journal of Eukaryotic Microbiology</i> , 66(2), 267–280. https://doi.org/10.1111/jeu.12668

KY59476 8.1	<i>Vorticella scapiformi</i>	Oligohymenophorea	Peritrichia	Marine/Brackish	Liang, Z., Shen, Z., Zhang, Y., Ji, D., Li, J., Warren, A., & Lin, X. (2019). Morphology and Phylogeny of Four New Vorticella Species (Ciliophora: Peritrichia) from Coastal Waters of Southern China. <i>The Journal of Eukaryotic Microbiology</i> , 66(2), 267–280. https://doi.org/10.1111/jeu.12668
KY64411 6.1	<i>Pleurotricha oligocirrata</i>	Spirotrichea	-	Freshwater	Park, M. H., Moon, J. H., Kim, K. N., & Jung, J. H. (2017). Morphology, morphogenesis, and molecular phylogeny of <i>Pleurotricha oligocirrata</i> nov. spec. (Ciliophora: Spirotrichea: Styloynchinae). <i>European Journal of Protistology</i> , 59, 114–123. https://doi.org/10.1016/j.ejop.2017.04.005
KY65291 7.1	<i>Arcanisutura chongmingensis</i>	Nassophorea	-	Marine/Brackish	Liao, W., Fan, X., Zhang, Q., Xu, Y., & Gu, F. (2018). Morphology and Phylogeny of Two Novel Ciliates, <i>Arcanisutura chongmingensis</i> n. gen., n. sp. and <i>Naxella paralucida</i> n. sp. from Shanghai, China. <i>The Journal of Eukaryotic Microbiology</i> , 65(1), 48–60. https://doi.org/10.1111/jeu.12431
KY65291 8.1	<i>Naxella paralucida</i>	Nassophorea	-	Freshwater	Liao, W., Fan, X., Zhang, Q., Xu, Y., & Gu, F. (2018). Morphology and Phylogeny of Two Novel Ciliates, <i>Arcanisutura chongmingensis</i> n. gen., n. sp. and <i>Naxella paralucida</i> n. sp. from Shanghai, China. <i>The Journal of Eukaryotic Microbiology</i> , 65(1), 48–60. https://doi.org/10.1111/jeu.12431
KY70376 7.1	<i>Sterkiella multicirrata</i>	Spirotrichea	Hypotrichia	Terrestrial	Li, F., Li, Y., Luo, D., Miao, M., & Shao, C. (2018). Morphology, Morphogenesis, and Molecular Phylogeny of a New Soil Ciliate, <i>Sterkiella multicirrata</i> sp. nov. (Ciliophora, Hypotrichia) from China. <i>The Journal of Eukaryotic Microbiology</i> , 65(5), 627–636. https://doi.org/10.1111/jeu.12508
KY85553 5.1	<i>Brachonella spiralis</i>	Armophorea	-	Freshwater	Bourland, W. A., Wendell, L., & Hampikian, G. (2014). Morphologic and molecular description of <i>Metopus fuscus</i> Kahl from North America and new rDNA sequences from seven metopids (Armophorea, Metopidae). <i>European Journal of Protistology</i> , 50(3), 213–230. https://doi.org/10.1016/j.ejop.2014.01.002
KY85553 9.1	<i>Metopus es</i>	Armophorea	-	Freshwater	Bourland, W., Rotterova, J., & Čepička, I. (2017). Redescription and molecular phylogeny of the type species for two main metopid genera, <i>Metopus es</i> (Müller, 1776) Lauterborn, 1916 and <i>Brachonella contorta</i> (Levander, 1894) Jankowski, 1964 (Metopida, Ciliophora), based on broad geographic sampling. <i>European Journal of Protistology</i> , 59, 133–154. https://doi.org/10.1016/j.ejop.2016.11.002
KY85554 0.1	<i>Colpoda maupasi</i>	Colpodea	-	Terrestrial	Foissner, W., Agatha, S., & Berger, H. (2002). Soil Ciliates (Protozoa, Ciliophora) from Namibia (Southwest Africa), with Emphasis on Two Contrasting Environments, the Etosha Region and the Namib Desert. <i>Denisia</i> , 5, 1-1459.

KY85556 5.1	<i>Plagiopyla nasuta</i>	Plagiopylea	-	Freshwater	Nitla, V., Serra, V., Fokin, S. I., Modeo, L., Verni, F., Sandeep, B. V., Kalavati, C., & Petroni, G. (2019). Critical revision of the family Plagiopylidae (Ciliophora: Plagiopylea), including the description of two novel species, <i>Plagiopyla ramani</i> and <i>Plagiopyla narasimhamurtii</i> , and redescription of <i>Plagiopyla nasuta</i> Stein, 1860 from India. <i>Zoological Journal of the Linnean Society</i> , 186(1), 1–45. https://doi.org/10.1093/zoolinnean/zly041
KY85556 6.1	<i>Plagiopyla raman</i>	Plagiopylea	-	Freshwater	Nitla, V., Serra, V., Fokin, S. I., Modeo, L., Verni, F., Sandeep, B. V., Kalavati, C., & Petroni, G. (2019). Critical revision of the family Plagiopylidae (Ciliophora: Plagiopylea), including the description of two novel species, <i>Plagiopyla ramani</i> and <i>Plagiopyla narasimhamurtii</i> , and redescription of <i>Plagiopyla nasuta</i> Stein, 1860 from India. <i>Zoological Journal of the Linnean Society</i> , 186(1), 1–45. https://doi.org/10.1093/zoolinnean/zly041
KY85557 3.1	<i>Stylonychia notophora</i>	Spirotrichea	Hypotrichia	Freshwater	Cotterill, F. P. D., Augustin, H., Medicus, R., & Foissner, W. (2013). Conservation of Protists: The Krauthügel Pond in Austria. <i>Diversity</i> , 5, 374–392, doi:10.3390/d5020374
KY85558 0.1	<i>Euplotes curdsi</i>	Spirotrichea	Euplotia	Marine/Brackish	Syberg-Olsen, M. J., Irwin, N. A., Vannini, C., Erra, F., Di Giuseppe, G., Boscaro, V., & Keeling, P. J. (2016). Biogeography and Character Evolution of the Ciliate Genus <i>Euplotes</i> (Spirotrichea, Euplotia), with Description of <i>Euplotes curdsi</i> sp. nov. <i>PloS One</i> , 11(11), e0165442. https://doi.org/10.1371/journal.pone.0165442
KY85558 1.1	<i>Blepharisma undulans</i>	Heterotricha	-	Freshwater	Fernandes, N. M., Paiva, T. S., Silva-Neto, I. D., Schlegel, M., & Schrago, C. G. (2016). Expanded phylogenetic analyses of the class Heterotricha (Ciliophora, Postciliodesmatophora) using five molecular markers and morphological data. <i>Molecular Phylogenetics and Evolution</i> , 95, 229–246. http://dx.doi.org/10.1016/j.ympev.2015.10.030
KY85558 2.1	<i>Pseudourostyla nova</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Chen X., Miao M., Ma, H., Al-Rasheid, K. A. S., Xu, K., Lin, X. (2014). Morphology, ontogeny, and phylogeny of two brackish urostyloid ciliates (Protist, Ciliophora, Hypotricha). <i>Journal of Eukaryotic Microbiology</i> , 61, 594–610. https://doi.org/10.1111/jeu.12137
KY87400 4.1	<i>Caudiurostyla sinensis</i>	Spirotrichea	-	Terrestrial	Lyu, Z., Li, J., Zhu, E., & Shao, C. (2018). Morphology and morphogenesis of a new soil urostyloid ciliate, with the establishment of a new genus <i>Caudiurostyla</i> gen. nov. (Ciliophora, Hypotrichia). <i>European Journal of Protistology</i> , 66, 166–176. https://doi.org/10.1016/j.ejop.2018.09.009
KY94750 8.1	<i>Rubrioxyticha guamensis</i>	Spirotrichea	Stichotrichia	Freshwater	Kumar, S., Bharti, D., Kabir, A. S., Hong, J. S., & Shin, M. K. (2018). <i>Rubrioxyticha guamensis</i> nov. spec. (Ciliophora, Spirotricha), a Novel Hypotrich Ciliate from Guam (United States), Micronesia. <i>Journal of Eukaryotic Microbiology</i> , 65, 392–399. https://doi.org/10.1111/jeu.12484

KY96874 1.1	<i>Afrokeronopsis aurea</i>	Spirotrichea	Stichotrichia	Freshwater	Kabir, A. S., Bharti, D., & Shin, M. K. (2018). Redescription of <i>Australocirrus shii</i> and First Report of <i>Afrokeronopsis aurea</i> (Ciliophora: Spirotrichea: Sporadotrichida) from South Korea. <i>Animal Systematics, Evolution and Diversity</i> , 34(1), 37–49. https://doi.org/10.5635/ASED.2018.34.1.024
KY98033 4.1	<i>Laackmanniella prolongata</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Kim, S. Y., Choi, J. K., Dolan, J. R., Shin, H. C., Lee, S., & Yang, E. J. (2013). Morphological and ribosomal DNA-based characterization of six Antarctic ciliate morphospecies from the Amundsen Sea with phylogenetic analyses. <i>Journal of Eukaryot Microbiology</i> , 60(5), 497-513. https://doi.org/10.1111/jeu.12057
KY98039 1.1	<i>Strombidium caudispina</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Song, W., Zhao, X., Liu, W., Hu, X., Al-Farraj, S. A., Al-Rasheid, K. A. S., Song, W., & Warren, A. (2015). Biodiversity of oligotrich ciliates in the South China Sea: description of three new <i>Strombidium</i> species (Protozoa, Ciliophora, Oligotrichia) with phylogenetic analyses. <i>Systematics & Biodiversity</i> , 13(6), 608-623. http://dx.doi.org/10.1080/14772000.2015.1081992
L24381.1	<i>Toxoplasma gondii</i>	Conoidasida (Apicomplexa)	Outgroup	-	Gao, F., Warren, A., Zhang, Q., Gong, J., Miao, M., Sun, P., Xu, D., Huang, J., Yi, Z., & Song, W. (2016). The All-Data-Based Evolutionary Hypothesis of Ciliated Protists with a Revised Classification of the Phylum Ciliophora (Eukaryota, Alveolata). <i>Scientific Reports</i> , 6, 1-14. https://doi.org/10.1038/srep24874
L31519.1	<i>Loxodes magnus</i>	Karyorelictea	-	Marine/Brackish	Gurdebeke, P. R., Mertens, K. N., Takano, Y., Yamaguchi, A., Bogus, K., Dunthorn, M., Matsuoka, K., Vrielinck, H., & Louwye, S. (2018). <i>European Journal of Protistology</i> , 66, 115-135. https://doi.org/10.1016/j.ejop.2018.09.002
LC42440 1.1	<i>Halodinium verrucatum</i>	Armophorea	-	Marine/Brackish	Gurdebeke, P. R., Mertens, K. N., Takano, Y., Yamaguchi, A., Bogus, K., Dunthorn, M., Matsuoka, K., Vrielinck, H., & Louwye, S. (2018). <i>European Journal of Protistology</i> , 66, 115-135. https://doi.org/10.1016/j.ejop.2018.09.002
LC42440 3.1	<i>Hexasterias problematica</i>	Armophorea	-	Freshwater	Rossi, A., Boscaro, V., Carducci, D., Serra, V., Modeo, L., Verni, F., Fokin, S. I., & Petroni, G. (2016). Ciliate communities and hidden biodiversity in freshwater biotopes of the Pistoia province (Tuscany, Italy). <i>European Journal of Protistology</i> , 53, 11–19. https://doi.org/10.1016/j.ejop.2015.12.005
LN86995 1	<i>Disematostoma sp</i>	Oligohymenophorea	-	Freshwater	Rossi, A., Boscaro, V., Carducci, D., Serra, V., Modeo, L., Verni, F., Fokin, S. I., & Petroni, G. (2016). Ciliate communities and hidden biodiversity in freshwater biotopes of the Pistoia province (Tuscany, Italy). <i>European Journal of Protistology</i> , 53, 11–19. https://doi.org/10.1016/j.ejop.2015.12.005
LN86995 2.1	<i>Linostomella sp</i>	Heterotrichia	-	Symbiosis	Souidenne, D., Florent, I., Dellinger, M., Justine, J. L., Romdhane, M. S., Furuya, H., & Grellier, P. (2016). Diversity of apostome ciliates, <i>Chromidina</i> spp. (Oligohymenophorea, Opalinopsidae), parasites of cephalopods of the Mediterranean Sea. <i>Parasite</i> (Paris, France), 23, 33. https://doi.org/10.1051/parasite/2016033

LT54666 0.1	<i>Chromidina chattoni</i>	Oligohymenophorea	-	Freshwater	Pitsch, G., Adamec, L., Dirren, S., Nitsche, F., Šimek, K., Sirová, D., & Posch, T. (2017). The Green <i>Tetrahymena utriculariae</i> n. sp. (Ciliophora, Oligohymenophorea) with Its Endosymbiotic Algae (<i>Micractinium</i> sp.), Living in Traps of a Carnivorous Aquatic Plant. <i>The Journal of Eukaryotic Microbiology</i> , 64(3), 322–335. https://doi.org/10.1111/jeu.12369
LT60500 1.1	<i>Tetrahymena utriculariae</i>	Oligohymenophorea	Hymenostomata	Freshwater	Boscaro, V., Carducci, D., Barbieri, G., Senra, M. V., Andreoli, I., Erra, F., Petroni, G., Verni, F., & Fokin, S. I. (2014). Focusing on genera to improve species identification: revised systematics of the ciliate <i>Spirostomum</i> . <i>Protist</i> , 165(4), 527–541. https://doi.org/10.1016/j.protis.2014.05.004
LT62848 5.1	<i>Spirostomum subtilis</i>	Heterotrichea	-	Freshwater	Przyboś, E., Rautian, M., Beliavskaia, A., & Tarcz, S. (2019). Evaluation of the molecular variability and characteristics of <i>Paramecium polycaryum</i> and <i>Paramecium nephridiatum</i> , within subgenus <i>Cypriostomum</i> (Ciliophora, Protista). <i>Molecular Phylogenetics & Evolution</i> , 132, 296–306. https://doi.org/10.1016/j.ympev.2018.12.003
LT62848 9.1	<i>Paramecium polycaryum</i>	Oligohymenophorea	Peniculia	Freshwater	Serra, V., Fokin, S. I., Gammuto, L., et al. Phylogeny of <i>Neobursaridium</i> reshapes the systematics of <i>Paramecium</i> (Oligohymenophorea, Ciliophora). <i>Zoologica Scripta</i> , 50, 241–268. https://doi.org/10.1111/zsc.12464
LT62849 3.1	<i>Paramecium aurelia</i>	Oligohymenophorea	Peniculia	Freshwater	Serra, V., D'Alessandro, A., Nitla, V. et al. (2021). The neotypification of <i>Frontonia vernalis</i> (Ehrenberg, 1833) Ehrenberg, 1838 and the description of <i>Frontonia paravernalis</i> sp. nov. trigger a critical revision of frontoniid systematics. <i>BMC Zoology</i> , 6, 4, 1-33. https://doi.org/10.1186/s40850-021-00067-9
LT62849 5.1	<i>Frontonia paramagna</i>	Oligohymenophorea	Peniculia	Freshwater	Fokin, S. I., Przybos, E., Chivilev, S. M., Beier, C. L., Horn, M., Skotarczak, B., Wodecka, B., & Fujishima, M. (2004). Morphological and molecular investigations of <i>Paramecium schewiakoffi</i> sp. nov. (Ciliophora, Oligohymenophorea) and current status of distribution and taxonomy of <i>Paramecium</i> spp. <i>European Journal of Protistology</i> , 40(3), 225-243. https://doi.org/10.1016/j.ejop.2004.02.001
LT62850 1.1	<i>Paramecium schewiakoffi</i>	Oligohymenophorea	Peniculia	Marine/Brackish	Boscaro, V., Syberg-Olsen, M. J., Irwin, N. A. T., Del Campo, J., & Keeling, P. J. (2019). What Can Environmental Sequences Tell Us About the Distribution of Low-Rank Taxa? The Case of <i>Euplotes</i> (Ciliophora, Spirotrichea), Including a Description of <i>Euplotes enigma</i> sp. nov. <i>Journal of Eukaryotic Microbiology</i> , 66 (2), 281-293. doi: 10.1111/jeu.12669
LT73257 2.1	<i>Euplotes enigma</i>	Spirotrichea	Euplotia	Freshwater	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.

MF00240 1.1	<i>Blepharisma americanum</i>	Heterotrichea	-	Freshwater	Wang, C., Zhang, T., Wang, Y., Katz, L. A., Gao, F., & Song, W. (2017). Disentangling sources of variation in SSU rDNA sequences from single cell analyses of ciliates: impact of copy number variation and experimental error. <i>Proceedings. Biological Sciences</i> , 284(1859), 20170425. https://doi.org/10.1098/rspb.2017.0425
MF03988 6.1	<i>Dartintinnus alderae</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Smith, S. A., Song, W., Gavrilova, N. A., Kurilov, A. V., Liu, W., McManus, G. B., & Santoferrara, L. F. (2018). <i>Dartintinnus alderae</i> n. g., n. sp., a Brackish Water Tintinnid (Ciliophora, Spirotrichea) with Dual-ended Lorica Collapsibility. <i>The Journal of Eukaryotic Microbiology</i> , 65(3), 400–411. https://doi.org/10.1111/jeu.12485
MF07421 5.1	<i>Trimyema finlayi</i>	Plagiopylea	-	Freshwater	Lewis, W. H., Sendra, K. M., Embley, T. M., & Esteban, G. F. (2018). Morphology and Phylogeny of a New Species of Anaerobic Ciliate, <i>Trimyema finlayi</i> n. sp., with Endosymbiotic Methanogens. <i>Frontiers in Microbiology</i> , 9, 140. https://doi.org/10.3389/fmicb.2018.00140
MF28814 3.1	<i>Apotrachelius multinucleatus</i>	Litostomatea	Haptoria	Marine/Brackish	Vdacny, P., & Foissner, W. (2012). Monograph of the Dileptids (Protista, Ciliophora, Rhynchostomatia). <i>Denisia</i> , 31, 1-529.
MF28814 5.1	<i>Rurikoplites armatus</i>	Litostomatea	Trichostomatia	Terrestrial	Vďačný, P., Rajter, L., Shazib, S., Jang, S. W., & Shin, M. K. (2017). Diversification dynamics of rhynchostomatian ciliates: the impact of seven intrinsic traits on speciation and extinction in a microbial group. <i>Scientific reports</i> , 7(1), 9918. https://doi.org/10.1038/s41598-017-09472-y
MF28814 6.1	<i>Rurikoplites longitrichus</i>	Litostomatea	Trichostomatia	Terrestrial	Vďačný, P., & Foissner, W. (2008). Description of Four New Soil Dileptids (Ciliophora, Haptoria), with Notes on Adaptations to the Soil Environment. <i>Acta Protozoologica</i> , 47(3), 211–230.
MF28977 7.1	<i>Urosoma emarginata</i>	Spirotrichea	Stichotrichia	Terrestrial	Wang, J., Qi, S., Chen, L., Warren, A., Miao, M., & Shao, C. (2017). Morphogenesis of a saline soil ciliate <i>Urosoma salmastra</i> (Dragesco and Dragesco-Kernéis, 1986) Berger, 1999 with notes on the phylogeny of <i>Urosoma</i> (Ciliophora, Hypotrichia). <i>European Journal of Protistology</i> , 61(Pt A), 180–193. https://doi.org/10.1016/j.ejop.2017.08.003
MF28977 8.1	<i>Urosoma salmastra</i>	Spirotrichea	Stichotrichia	Terrestrial	Wang, J., Qi, S., Chen, L., Warren, A., Miao, M., & Shao, C. (2017). Morphogenesis of a saline soil ciliate <i>Urosoma salmastra</i> (Dragesco and Dragesco-Kernéis, 1986) Berger, 1999 with notes on the phylogeny of <i>Urosoma</i> (Ciliophora, Hypotrichia). <i>European Journal of Protistology</i> , 61(Pt A), 180–193. https://doi.org/10.1016/j.ejop.2017.08.003
MF31912 1.1	<i>Pseudocyrtohymenides lacunae</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Jung, J.-H., Park, K.-M., & Min, G.-S. (2017). Morphology and Molecular Phylogeny of <i>Pseudocyrtohymenides lacunae</i> nov. gen., nov. spec. (Ciliophora: Oxytrichidae) from South Korea. <i>Acta Protozoologica</i> , 56, 9-16.
MF43702 0.1	<i>Blepharisma halophilum</i>	Heterotrichea	-	Marine/Brackish	Pan, H., & Stoeck, T. (2017). Redescription of the halophile ciliate, <i>Blepharisma halophilum</i> Ruinen, 1938 (Ciliophora, Heterotrichea, Heterotrichida) shows that the genus <i>Blepharisma</i> is non-monophyletic. <i>European journal of Protistology</i> , 61(Pt A), 20–28. https://doi.org/10.1016/j.ejop.2017.07.004

MF44565 4.1	<i>Euplotes platystoma</i>	Spirotrichea	Euplotia	Marine/Brackish	Yan, Y., Fan, Y., Luo, X., El-Serehy, H. A., Bourland, W., & Chen, X. (2018). New contribution to the species-rich genus <i>Euplotes</i> : Morphology, ontogeny and systematic position of two species (Ciliophora; Euplotia). <i>European Journal of Protistology</i> , 64, 20–39. https://doi.org/10.1016/j.ejop.2018.03.003
MF44565 5.1	<i>Euplotes estuarinu</i>	Spirotrichea	Euplotia	Marine/Brackish	Yan, Y., Fan, Y., Luo, X., El-Serehy, H. A., Bourland, W., & Chen, X. (2018). New contribution to the species-rich genus <i>Euplotes</i> : Morphology, ontogeny and systematic position of two species (Ciliophora; Euplotia). <i>European Journal of Protistology</i> , 64, 20–39. https://doi.org/10.1016/j.ejop.2018.03.003
MF44565 6.1	<i>Parallelostrombidium kahli</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Song, W., Wang, L., Li, L., Al-Farraj, S. A., Aleidan, A., Smith, S., & Hu, X. (2018). Morphological Characterizations of Four Species of <i>Parallelostrombidium</i> (Ciliophora, Oligotrichia), with a Note on the Phylogeny of the Genus. <i>The Journal of Eukaryotic Microbiology</i> , 65(5), 679–693. https://doi.org/10.1111/jeu.12513
MF44565 7.1	<i>Parallelostrombidium paraellipticum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Song, W., Wang, L., Li, L., Al-Farraj, S. A., Aleidan, A., Smith, S., & Hu, X. (2018). Morphological Characterizations of Four Species of <i>Parallelostrombidium</i> (Ciliophora, Oligotrichia), with a Note on the Phylogeny of the Genus. <i>The Journal of Eukaryotic Microbiology</i> , 65(5), 679–693. https://doi.org/10.1111/jeu.12513
MF44565 8.1	<i>Parallelostrombidium dragescoi</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Song, W., Wang, L., Li, L., Al-Farraj, S. A., Aleidan, A., Smith, S., & Hu, X. (2018). Morphological Characterizations of Four Species of <i>Parallelostrombidium</i> (Ciliophora, Oligotrichia), with a Note on the Phylogeny of the Genus. <i>The Journal of Eukaryotic Microbiology</i> , 65(5), 679–693. https://doi.org/10.1111/jeu.12513
MF44565 9.1	<i>Parallelostrombidium jankowskii</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Song, W., Wang, L., Li, L., Al-Farraj, S. A., Aleidan, A., Smith, S., & Hu, X. (2018). Morphological Characterizations of Four Species of <i>Parallelostrombidium</i> (Ciliophora, Oligotrichia), with a Note on the Phylogeny of the Genus. <i>The Journal of Eukaryotic Microbiology</i> , 65(5), 679–693. https://doi.org/10.1111/jeu.12513
MF44566 0.1	<i>Gonostomum kuehnelti</i>	Spirotrichea	Hypotrichia	Terrestrial	Ning, Y., Chen, L., Sheng, Y., Zhang, H., Al-Farraj, S. A., & Huang, J. (2019). Morphology, morphogenesis, and molecular phylogeny of a soil ciliate, <i>Gonostomum kuehnelti</i> Foissner, 1987 (Ciliophora, Hypotrichia), from northwestern China. <i>Journal of Natural History</i> , 53, 19–20, 1169–1185. https://doi.org/10.1080/00222933.2019.1634771
MF44947 6.1	<i>Rimaleptus binucleatus</i>	Litostomatea	Haptoria	Terrestrial	Jang, S. W., Vdacny, P., Shazib, S.U., & Shin, M. K. (2014). Morphological and molecular characterization of the name-bearing type species <i>Rimaleptus binucleatus</i> (Kahl, 1931), with a phylogenetic re-analysis of dileptid evolutionary history (Ciliophora: Litostomatea: Rhynchostomatia). <i>European Journal of Protistology</i> , 50(5), 456–471. http://dx.doi.org/10.1016/j.ejop.2014.07.003

MF47434 0.1	<i>Foissnerides sp</i>	Litostomatea	Haptoria	Terrestrial	Huang, J. B., Zhang, T., Zhang, Q., Li, Y., Warre, A., Pan, H., & Yan, Y. (2018). Further insights into the highly derived haptorids (Ciliophora, Litostomatea): Phylogeny based on multigene data. <i>Zoologica Scripta</i> , 47(2), 231–242. https://doi.org/10.1111/zsc.12269
MF47434 2.1	<i>Homalozoon vermiculare</i>	Litostomatea	Haptoria	Freshwater	Huang, J. B., Zhang, T., Zhang, Q., Li, Y., Warre, A., Pan, H., & Yan, Y. (2018). Further insights into the highly derived haptorids (Ciliophora, Litostomatea): Phylogeny based on multigene data. <i>Zoologica Scripta</i> , 47(2), 231–242. https://doi.org/10.1111/zsc.12269
MF47434 4.1	<i>Lacrymaria maurea</i>	Litostomatea	Haptoria	Marine/Brackish	Huang, J. B., Zhang, T., Zhang, Q., Li, Y., Warre, A., Pan, H., & Yan, Y. (2018). Further insights into the highly derived haptorids (Ciliophora, Litostomatea): Phylogeny based on multigene data. <i>Zoologica Scripta</i> , 47(2), 231–242. https://doi.org/10.1111/zsc.12269
MF47434 8.1	<i>Phialina vertens</i>	Litostomatea	Haptoria	Freshwater	Rajter, L., Bourland, W., & Vdacny, P. (2019). Morpho-molecular Characterization of the Litostomatean Predatory Ciliate <i>Phialina pupula</i> (Müller, 1773) Foissner, 1983 (Haptoria, Lacrymariidae). <i>Acta Protozoologica</i> , 58(2), 53-68). https://doi.org/10.4467/16890027AP.19.004.10835
MF56397 0.1	<i>Saprodinium dentatum</i>	Odontostomatea	-	Freshwater	Fernandes, N. M., Vizzoni, V. F., Borges, B. N., Soares, C. A. G., Silva-Neto, I. D., & Paiva, T. S. (2018). Molecular phylogeny and comparative morphology indicate that odontostomatids (Alveolata, Ciliophora) form a distinct class-level taxon related to Armophorea. <i>Molecular Phylogenetics and Evolution</i> , 126, 382–389. https://doi.org/10.1016/j.ympev.2018.04.026
MF82861 5.1	<i>Caenomorpha medusula</i>	Armophorea	-	Freshwater	Li, S., Bourland, W. A., Al-Farraj, S. A., Li, L., & Hu, X. (2017). Description of two species of caenomorphid ciliates (Ciliophora, Armophorea): Morphology and molecular phylogeny. <i>European Journal of Protistology</i> , 61(Pt A), 29–40. https://doi.org/10.1016/j.ejop.2017.08.001
MF92879 9.1	<i>Aspidisca lynceus</i>	Spirotrichea	Euplotia	Freshwater	Lian, C., Luo, X., Fan, X., Huang, J., Yu, Y., Bourland, W., & Song, W. (2018). Morphological and Molecular Redefinition of <i>Euplotes platystoma</i> Dragesco & Dragesco-Kernéis, 1986 and <i>Aspidisca lynceus</i> (Müller, 1773) Ehrenberg, 1859, with Reconsideration of a "Well-known" <i>Euplotes</i> Ciliate, <i>Euplotes harpa</i> Stein, 1859 (Ciliophora, Euplotida). <i>The Journal of Eukaryotic Microbiology</i> , 65(4), 531–543. https://doi.org/10.1111/jeu.12499
MG02051 6.1	<i>Pinacocoleps pulcher</i>	Armophorea	-	Marine/Brackish	Monn, J. H., Kim, J. H., & Jung, J.-H. (2017). Taxonomical reinvestigation of the colepid species <i>Pinacocoleps pulcher</i> (Spiegel, 1926) Foissner et al., 2008 (Ciliophora: Prorodontida: Colepidae). https://doi.org/10.4467/16890027AP.17.014.7495

MG26414 3.1	<i>Fuscheria nodosa</i>	Litostomatea	Haptoria	Terrestrial	Rajter, L., & Vdacny, P. (2017). Constraints on Phylogenetic Interrelationships among Four Free-living Litostomatean Lineages Inferred from 18S rRNA gene-ITS Region sequences and Secondary Structure of the ITS2 molecule. <i>Acta Protozoologica</i> , 56, 255-281. https://doi.org/10.4467/16890027AP.17.023.7825
MG26414 6.1	<i>Apobryophyllum schmidingeri</i>	Litostomatea	Haptoria	Terrestrial	Rajter, L., & Vdacny, P. (2017). Constraints on Phylogenetic Interrelationships among Four Free-living Litostomatean Lineages Inferred from 18S rRNA gene-ITS Region sequences and Secondary Structure of the ITS2 molecule. <i>Acta Protozoologica</i> , 56, 255-281. https://doi.org/10.4467/16890027AP.17.023.7825
MG26414 7.1	<i>Paraenchelys terricola</i>	Litostomatea	Haptoria	Terrestrial	Rajter, L., & Vdacny, P. (2017). Constraints on Phylogenetic Interrelationships among Four Free-living Litostomatean Lineages Inferred from 18S rRNA gene-ITS Region sequences and Secondary Structure of the ITS2 molecule. <i>Acta Protozoologica</i> , 56, 255-281. https://doi.org/10.4467/16890027AP.17.023.7825
MG26414 8.1	<i>Litonotus muscorum</i>	Litostomatea	Haptoria	Terrestrial	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
MG45079 3.1	<i>Apertospathula oktemae</i>	Litostomatea	Haptoria	Marine/Brackish	Yıldız İ. (2018). Morphology and phylogeny of <i>Apertospathula oktemae</i> n. sp. (Ciliophora, Haptoria, Spathidiida) from Lake Van, Turkey. <i>European Journal of Protistology</i> , 66, 1–8. https://doi.org/10.1016/j.ejop.2018.06.001
MG45657 8.1	<i>Frontonia anatolica</i>	Oligohymenophorea	Peniculia	Marine/Brackish	Kizildag, S., & Yildiz, I. (2019). Morphology and molecular phylogeny of four <i>Frontonia</i> species from Turkey (Protista, Ciliophora). <i>Zootaxa</i> , 4609(3), zootaxa.4609.3.9. https://doi.org/10.11646/zootaxa.4609.3.9
MG45657 9.2	<i>Frontonia acuminata</i>	Oligohymenophorea	Peniculia	Freshwater	Kizildag, S., & Yildiz, I. (2019). Morphology and molecular phylogeny of four <i>Frontonia</i> species from Turkey (Protista, Ciliophora). <i>Zootaxa</i> , 4609(3), zootaxa.4609.3.9. https://doi.org/10.11646/zootaxa.4609.3.9
MG45658 0.1	<i>Frontonia angusta</i>	Oligohymenophorea	Peniculia	Freshwater	Kizildag, S., & Yildiz, I. (2019). Morphology and molecular phylogeny of four <i>Frontonia</i> species from Turkey (Protista, Ciliophora). <i>Zootaxa</i> , 4609(3), zootaxa.4609.3.9. https://doi.org/10.11646/zootaxa.4609.3.9
MG56605 8.1	<i>Chlamydonon triquetrus</i>	Phyllopharyngia	Cyrtophoria	Marine/Brackish	Qu, Z., Li, L., Lin, X., Stoeck, T., Pan, H., Al-Rasheid, K. A. S. & Song, W. (2018). Diversity of the cyrtophorid genus <i>Chlamydonon</i> (Protista, Ciliophora): its systematics and geographic distribution, with taxonomic descriptions of three species. <i>Systematics & Biodiversity</i> , 16, 5, 497-511, https://doi.org/10.1080/14772000.2018.1456493
MG56605 9.1	<i>Chlamydonon bourlandi</i>	Phyllopharyngia	Cyrtophoria	Marine/Brackish	Qu, Z., Li, L., Lin, X., Stoeck, T., Pan, H., Al-Rasheid, K. A. S. & Song, W. (2018). Diversity of the cyrtophorid genus <i>Chlamydonon</i> (Protista, Ciliophora): its systematics and geographic distribution, with taxonomic descriptions of three species. <i>Systematics & Biodiversity</i> , 16, 5, 497-511, https://doi.org/10.1080/14772000.2018.1456493

MG56606 0.1	<i>Chlamyodon wilbert</i>	Phyllopharyng ea	Cyrtophoria	Marine/Brac kish	Qu, Z., Li, L., Lin, X., Stoeck, T., Pan, H., Al-Rasheid, K. A. S. & Song, W. (2018). Diversity of the cyrtophorid genus <i>Chlamyodon</i> (Protista, Ciliophora): its systematics and geographic distribution, with taxonomic descriptions of three species. <i>Systematics & Biodiversity</i> , 16,5, 497-511, https://doi.org/10.1080/14772000.2018.1456493
MG60360 2.1	<i>Euplotes antarcticus</i>	Spirotrichea	Euplotia	Marine/Brac kish	Park, M. H., Jung, J. H., Jo, E., Park, K. M., Baek, Y. S., Kim, S. J., & Min, G. S. (2019). Utility of mitochondrial CO1 sequences for species discrimination of Spirotrichea ciliates (Protozoa, Ciliophora). <i>Mitochondrial DNA Part A</i> , 30(1), 148–155. https://doi.org/10.1080/24701394.2018.1464563
MG60360 6.1	<i>Quadrasticha setigera</i>	Spirotrichea	Stichotrichia	Terrestrial	Park, M. H., Jung, J. H., Jo, E., Park, K. M., Baek, Y. S., Kim, S. J., & Min, G. S. (2019). Utility of mitochondrial CO1 sequences for species discrimination of Spirotrichea ciliates (Protozoa, Ciliophora). <i>Mitochondrial DNA Part A</i> , 30(1), 148–155. https://doi.org/10.1080/24701394.2018.1464563
MG60360 9.1	<i>Metabakuella sp</i>	Spirotrichea	-	Freshwater	Park, M. H., Jung, J. H., Jo, E., Park, K. M., Baek, Y. S., Kim, S. J., & Min, G. S. (2019). Utility of mitochondrial CO1 sequences for species discrimination of Spirotrichea ciliates (Protozoa, Ciliophora). <i>Mitochondrial DNA Part A</i> , 30(1), 148–155. https://doi.org/10.1080/24701394.2018.1464563
MG60361 4.1	<i>Extraholosticha sylvatica</i>	Spirotrichea	Stichotrichia	Terrestrial	Park, M. H., Jung, J. H., Jo, E., Park, K. M., Baek, Y. S., Kim, S. J., & Min, G. S. (2019). Utility of mitochondrial CO1 sequences for species discrimination of Spirotrichea ciliates (Protozoa, Ciliophora). <i>Mitochondrial DNA Part A</i> , 30(1), 148–155. https://doi.org/10.1080/24701394.2018.1464563
MG60361 9.1	<i>Pseudourostyla cratoides</i>	Spirotrichea	Stichotrichia	Marine/Brac kish	Park, M. H., Jung, J. H., Jo, E., Park, K. M., Baek, Y. S., Kim, S. J., & Min, G. S. (2019). Utility of mitochondrial CO1 sequences for species discrimination of Spirotrichea ciliates (Protozoa, Ciliophora). <i>Mitochondrial DNA Part A</i> , 30(1), 148–155. https://doi.org/10.1080/24701394.2018.1464563
MG60363 7.1	<i>Caryotricha marina</i>	Spirotrichea	Protohypotric hia	Marine/Brac kish	Park, M. H., Jung, J. H., Jo, E., Park, K. M., Baek, Y. S., Kim, S. J., & Min, G. S. (2019). Utility of mitochondrial CO1 sequences for species discrimination of Spirotrichea ciliates (Protozoa, Ciliophora). <i>Mitochondrial DNA Part A</i> , 30(1), 148–155. https://doi.org/10.1080/24701394.2018.1464563
MG71977 4.1	<i>Acanthostomella sp</i>	Spirotrichea	-	Marine/Brac kish	Santoferrara, L. F., Rubin, E., & McManus, G. B. (2018). Global and local DNA (meta)barcoding reveal new biogeography patterns in tintinnid ciliates. <i>Journal of Plankton Research</i> , 40 (3), 209-221. https://doi.org/10.1093/plankt/fby011

MG83709 4.1	<i>Balantidium grimi</i>	Litostomatea	Trichostomat ia	Symbiosis	Zhao, W., Li, C., Zhang, D., Wang, R., Zheng, Y., Zou, H., Li, W., Wu, S., Wang, G., & Li, M. (2018). <i>Balantidium grimi</i> n. sp. (Ciliophora, Litostomatea), a new species inhabiting the rectum of the frog <i>Quasipaa spinosa</i> from Lishui, China. <i>Parasite</i> (Paris, France), 25, 29. https://doi.org/10.1051/parasite/2018031
MG89671 0.1	<i>Palmarella salina</i>	Armophorea	-	Marine/Brackish	Rotterová, J., Bourland, W., & Čepička, I. (2018). Tropidoatractidae fam. nov., a Deep Branching Lineage of Metopida (Armophorea, Ciliophora) Found in Diverse Habitats and Possessing <i>Prokaryotic Symbionts</i> . <i>Protist</i> , 169(3), 362–405. https://doi.org/10.1016/j.protis.2018.04.003
MG89671 3.1	<i>Tropidoatractus levanderi</i>	Armophorea	-	Freshwater	Rotterová, J., Bourland, W., & Čepička, I. (2018). Tropidoatractidae fam. nov., a Deep Branching Lineage of Metopida (Armophorea, Ciliophora) Found in Diverse Habitats and Possessing <i>Prokaryotic Symbionts</i> . <i>Protist</i> , 169(3), 362–405. https://doi.org/10.1016/j.protis.2018.04.003
MG89671 7.1	<i>Tropidoatractus spinosus</i>	Armophorea	-	Freshwater	Rotterová, J., Bourland, W., & Čepička, I. (2018). Tropidoatractidae fam. nov., a Deep Branching Lineage of Metopida (Armophorea, Ciliophora) Found in Diverse Habitats and Possessing <i>Prokaryotic Symbionts</i> . <i>Protist</i> , 169(3), 362–405. https://doi.org/10.1016/j.protis.2018.04.003
MG89672 4.1	<i>Tropidoatractus acuminatus</i>	Armophorea	-	Freshwater	Rotterová, J., Bourland, W., & Čepička, I. (2018). Tropidoatractidae fam. nov., a Deep Branching Lineage of Metopida (Armophorea, Ciliophora) Found in Diverse Habitats and Possessing <i>Prokaryotic Symbionts</i> . <i>Protist</i> , 169(3), 362–405. https://doi.org/10.1016/j.protis.2018.04.003
MG96650 7.1	<i>Idiometopus turbo</i>	Armophorea	-	Freshwater	Bourland, W., Rotterová, J., Luo, X., & Čepička, I. (2018). The Little-known Freshwater Metopid Ciliate, <i>Idiometopus turbo</i> (Dragesco and Dragesco-Kernéis, 1986) nov. gen., nov. comb., Originally Discovered in Africa, Found on the Micronesian Island of Guam. <i>Protist</i> , 169(4), 494–506. https://doi.org/10.1016/j.protis.2018.05.004
MG99318 9.1	<i>Neogastrostyla aqua</i>	Spirotrichea	-	Freshwater	Kaur, H., Shashi., Negi, R. K., & Kamra, K. (2019). Morphological and molecular characterization of <i>Neogastrostyla aqua</i> nov. gen., nov. spec. (Ciliophora, Hypotrichia) from River Yamuna, Delhi; comparison with <i>Gastrostyla</i> -like genera. <i>European Journal of Protistology</i> , 68, 68–79. https://doi.org/10.1016/j.ejop.2019.01.002
MG99500 2.1	<i>Blepharisma sinuosum</i>	Heterotrichea	-	Freshwater	Fernandes, N. M., Paiva, T. S., Silva-Neto, I. D., Schlegel, M., & Schrago, C. G. (2016). Expanded phylogenetic analyses of the class Heterotrichea (Ciliophora, Postciliodesmatophora) using five molecular markers and morphological data. <i>Molecular Phylogenetics and Evolution</i> , 95, 229–246. http://dx.doi.org/10.1016/j.ympev.2015.10.030

MH02439 0.1	<i>Gruberia lanceolata</i>	Heterotrichea	-	Marine/Brackish	Chen, X., Shazib, S. U. A., Kim, J. H., Kim, M. S., & Shin, M. K. (2018). New contributions to <i>Gruberia lanceolata</i> (Gruber, 1884) Kahl, 1932 based on analyses of multiple populations and genes (Ciliophora, Heterotrichea, Gruberiidae). <i>European Journal of Protistology</i> , 65, 16–30. https://doi.org/10.1016/j.ejop.2018.05.001
MH04573 2.1	<i>Neourostylopsis paraflava</i>	Spirotrichea	Stichotrichia	Marine/Brackish	Zhang, T., Qi, H., Zhang, T., Sheng, Y., Warren, A., & Shao, C. (2018). Morphology, morphogenesis and molecular phylogeny of a new brackish water subspecies, <i>Neourostylopsis flava paraflava</i> nov. subsp. (Ciliophora, Hypotrichia, Urostylidae), with redefinition of the genus <i>Neourostylopsis</i> . <i>European Journal of Protistology</i> , 66, 48–62. https://doi.org/10.1016/j.ejop.2018.07.004
MH08681 5.1	<i>Atopospira galeata</i>	Armophorea	-	Terrestrial	Vďačný, P., Rajter, L., Stoeck, T., & Foissner, W. (2019). A Proposed Timescale for the Evolution of Armophorean Ciliates: Clevelandellids Diversify More Rapidly Than Metopids. <i>The Journal of Eukaryotic Microbiology</i> , 66(1), 167–181. https://doi.org/10.1111/jeu.12641
MH08682 0.1	<i>Metopus hasei</i>	Armophorea	-	Terrestrial	Vďačný, P., Rajter, L., Stoeck, T., & Foissner, W. (2019). A Proposed Timescale for the Evolution of Armophorean Ciliates: Clevelandellids Diversify More Rapidly Than Metopids. <i>The Journal of Eukaryotic Microbiology</i> , 66(1), 167–181. https://doi.org/10.1111/jeu.12641
MH08682 1.1	<i>Metopus laminarius</i>	Armophorea	-	Freshwater	Bourland, W. A., Wndell, L., & Hampikian, G. (2014). Morphologic and molecular description of <i>Metopus fuscus</i> Kahl from North America and new rDNA sequences from seven metopids (Armophorea, Metopidae). <i>European Journal of Protistology</i> , 50 (3), 213-230. https://doi.org/10.1016/j.ejop.2014.01.002
MH08682 2.1	<i>Metopus minor</i>	Armophorea	-	Terrestrial	Vďačný, P., Rajter, L., Stoeck, T., & Foissner, W. (2019). A Proposed Timescale for the Evolution of Armophorean Ciliates: Clevelandellids Diversify More Rapidly Than Metopids. <i>The Journal of Eukaryotic Microbiology</i> , 66(1), 167–181. https://doi.org/10.1111/jeu.12641
MH08682 4.1	<i>Metopus setosus</i>	Armophorea	-	Terrestrial	Vďačný, P., Rajter, L., Stoeck, T., & Foissner, W. (2019). A Proposed Timescale for the Evolution of Armophorean Ciliates: Clevelandellids Diversify More Rapidly Than Metopids. <i>The Journal of Eukaryotic Microbiology</i> , 66(1), 167–181. https://doi.org/10.1111/jeu.12641
MH08682 5.1	<i>Metopus boletus</i>	Armophorea	-	Terrestrial	Vďačný, P., Rajter, L., Stoeck, T., & Foissner, W. (2019). A Proposed Timescale for the Evolution of Armophorean Ciliates: Clevelandellids Diversify More Rapidly Than Metopids. <i>The Journal of Eukaryotic Microbiology</i> , 66(1), 167–181. https://doi.org/10.1111/jeu.12641
MH14325 1.1	<i>Uroleptoides longiseries</i>	Spirotrichea	Stichotrichia	Terrestrial	Wang, J., Li, J., Qi, S., Warren, A., & Shao, C. (2019). Morphogenesis and Molecular Phylogeny of a Soil Ciliate <i>Uroleptoides longiseries</i> (Foissner, Agatha and Berger, 2002) Berger 2008 (Ciliophora, Hypotrichia). <i>The Journal of Eukaryotic Microbiology</i> , 66(2), 34–342. https://doi.org/10.1111/jeu.12674

MH19132 9.1	<i>Trichodina reticulata</i>	Oligohymenophorea	Peritrichia	Symbiosis	Wang, S., Zhao, Y., Du, Y., & Tang, F. (2019). Morphological Redescription and Molecular Identification of <i>Trichodina reticulata</i> Hirschmann & Partsch, 1955 (Ciliophora, Mobilida, Trichodinidae) with the Supplemental New Data of SSU rDNA and ITS-5.8S rDNA. <i>The Journal of Eukaryotic Microbiology</i> , 66(3), 447–459. https://doi.org/10.1111/jeu.12689
MH29583 0.1	<i>Spirostomum semivirescens</i>	Heterotrichea	-	Freshwater	Hine, H. N., Onsbring, H., Ettema, T. J. G., & Esteban, G. F. (2018). Molecular Investigation of the Ciliate <i>Spirostomum semivirescens</i> , with First Transcriptome and New Geographical Records. <i>Protist</i> , 169, 976–886. https://doi.org/10.1016/j.protis.2018.08.001
MH30110 3.1	<i>Sicuophora multigranularis</i>	Armophorea	-	Symbiosis	Li, C., Zhao, W., Zhang, D., Wang, R., Wang, G., Zou, H., Li, W., Wu, S., & Li, M. (2018). <i>Sicuophora</i> (Syn. <i>Wichtermania</i>) <i>multigranularis</i> from <i>Quasipaa spinosa</i> (Anura): morphological and molecular study, with emphasis on validity of <i>Sicuophora</i> (Armophorea, Clevelandellida). <i>Parasite</i> (Paris, France), 25, 38. https://doi.org/10.1051/parasite/2018035
MH63656 8.1	<i>Holostichides chardezi</i>	Spirotrichea	Stichotrichia	Terrestrial	Zhu, E., Ba, S., Lyu, Z., Li, J., & Shao, C. (2019). Morphogenesis and Molecular Phylogeny of the Soil Ciliate <i>Holostichides chardezi</i> (Ciliophora, Hypotrichia, Bakuellidae), with Redefinition of <i>Holostichides</i> Foissner, 1987 and Establishment of a New Genus <i>Anteholostichides</i> . <i>The Journal of Eukaryotic Microbiology</i> , 66(5), 730–739. https://doi.org/10.1111/jeu.12717
MH67340 9.1	<i>Parafavella gigantea</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Jung, J.-H., Moon, J. H., Park, K.-M., Kim, S., Dolan, J. R., & Yang, E. J. Novel insights into the genetic diversity of <i>Parafavella</i> based on mitochondrial CO1 sequences. <i>Zoologica Scripta</i> , 47, 743–755. https://doi.org/10.1111/zsc.12312
MH68847 9.1	<i>Apostrombidium pseudokielum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Song, W., Xu, D., Zhang, Q., Liu, W., Warren, A., & Song, W. (2019). Taxonomy and phylogeny of two poorly studied genera of marine oligotrich ciliates including descriptions of two new species: <i>Cyrtostrombidium paraboreale</i> sp. n. and <i>Apostrombidium orientale</i> sp. n. (Ciliophora: Spirotrichea). <i>European Journal of Protistology</i> , 70, 1–16. https://doi.org/10.1016/j.ejop.2019.05.001
MH71843 9.1	<i>Caudiholosticha antarctic</i>	Spirotrichea	-	Terrestrial	Park, K.-M., Min, G.-S., & Kim, S. (2018). Morphology and phylogeny of a new species, <i>Uroleptus (Caudiholosticha) antarctica</i> n. sp. (Ciliophora, Hypotrichia) from Greenwich Island in Antarctica. <i>Zootaxa</i> , 4483(3), 591–599. https://doi.org/10.11646/zootaxa.4483.3.10
MH79212 0.1	<i>Schmidtella ultrahalophila</i>	Spirotrichea	-	Marine/Brackish	Li, F., Qu, Z., Luo, D., Filker, S., Hu, X., & Stoeck, T. (2019). Morphology, Morphogenesis and Molecular Phylogeny of a New Obligate Halophile Ciliate, <i>Schmidtella ultrahalophila</i> gen. nov., spec. nov. (Ciliophora, Hypotrichia) Isolated from a Volcanic Crater on Sal (Cape Verde Islands). <i>The Journal of Eukaryotic Microbiology</i> , 66(5), 694–706. https://doi.org/10.1111/jeu.12714

MH79529 1.1	<i>Euplotes wuhanensi</i>	Spirotrichea	Euplotia	Terrestrial	Lian, C., Zhang, T., Al-Rasheid, K., Yu, Y., Jiang, J., & Huang, J. (2019). Morphology and SSU rDNA-based phylogeny of two <i>Euplotes</i> species from China: <i>E. wuhanensis</i> sp. n. and <i>E. muscicola</i> Kahl, 1932 (Ciliophora, Euplotida). <i>European Journal of Protistology</i> , 67, 1–14. https://doi.org/10.1016/j.ejop.2018.10.001
MH82230 7.1	<i>Dileptus jonesi</i>	Litostomatea	Rhynchostomata	Freshwater	Vdacny, P., & Foissner, W. (2012). Monograph of the Dileptids (Protista, Ciliophora, Rhynchostomata). <i>Denisia</i> , 31, 1–529.
MK05625 3.1	<i>Phialina caudata</i>	Litostomatea	Haptoria	Marine/Brackish	Wang, Y., Ji, D., & Yin, J. (2019). Morphology and phylogeny of two <i>Phialina</i> species (Ciliophora, Haptoria) from northern China. <i>European Journal of Protistology</i> , 67, 46–58. https://doi.org/10.1016/j.ejop.2018.10.002
MK05625 4.1	<i>Phialina clampi</i>	Litostomatea	Haptoria	Marine/Brackish	Wang, Y., Ji, D., & Yin, J. (2019). Morphology and phylogeny of two <i>Phialina</i> species (Ciliophora, Haptoria) from northern China. <i>European Journal of Protistology</i> , 67, 46–58. https://doi.org/10.1016/j.ejop.2018.10.002
MK08474 8.1	<i>Nyctotheroides cordiformis</i>	Armophorea	-	Symbiosis	Li, M., Hu, G., Li, C., Zhao, W. S., Zou, H., Li, W. X., Wu, S. G., Wang, G. T., & Ponce-Gordo, F. (2020). Morphological and molecular characterization of a new ciliate <i>Nyctotheroides grimi</i> n. sp. (Armophorea, Clevelandellida) from Chinese frogs. <i>Acta Tropica</i> , 208, 105531. https://doi.org/10.1016/j.actatropica.2020.105531
MK20463 9.1	<i>Balantidium ctenopharyngodoni</i>	Litostomatea	Trichostomatia	Symbiosis	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
MK21183 3.1	<i>Hemiholosticha kahli</i>	Spirotrichea	-	Freshwater	Luo, X., Huang, J. A., Li, L., Song, W., & Bourland, W. A. (2019). Phylogeny of the ciliate family Psilotrichidae (Protista, Ciliophora), a curious and poorly-known taxon, with notes on two algae-bearing psilotrichids from Guam, USA. <i>BMC Evolutionary Biology</i> , 19(1), 125. https://doi.org/10.1186/s12862-019-1450-z
MK26524 7.1	<i>Parabistichella multilinea</i>	Spirotrichea	Hypotrichia	Terrestrial	Kim, J. H., Omar, A., & Jung, J. H. (2019). Morphology and Phylogeny of the Soil Ciliate <i>Parabistichella multilinea</i> sp. nov. (Protozoa: Ciliophora: Hypotricha). <i>Zoological Science</i> , 36(3), 242–249. https://doi.org/10.2108/zs180070
MK38561 0.1	<i>Urosoma caudata</i>	Spirotrichea	Stichotrichia	Freshwater	Xu, W., Zhao, Y., Pan, B., Liu, Y., Li, Y., Bourland, W. A., & Luo, X. (2020). Morphology, Morphogenesis, and Phylogeny of <i>Urosoma caudata</i> (Ehrenberg, 1833) Berger, 1999 (Ciliophora, Hypotrichia) based on a Chinese Population. <i>The Journal of Eukaryotic Microbiology</i> , 67(1), 76–85. https://doi.org/10.1111/jeu.12756
MK48206 4.1	<i>Australocirrus rubrus</i>	Spirotrichea	-	Terrestrial	Kim, K. S., Jung, J. H., & Min, G. S. (2019). Morphology and Molecular Phylogeny of Two New Terrestrial Ciliates, <i>Australocirrus rubrus</i> n. sp. and <i>Notohyrna gangwonensis</i> n. sp. (Ciliophora: Oxytrichidae), from South Korea. <i>The Journal of Eukaryotic Microbiology</i> , 66(5), 740–751. https://doi.org/10.1111/jeu.12718

MK48206 5.1	<i>Notohymena gangwonensis</i>	Spirotrichea	Stichotrichia	Terrestrial	Kim, K. S., Jung, J. H., & Min, G. S. (2019). Morphology and Molecular Phylogeny of Two New Terrestrial Ciliates, <i>Australocirrus rubrus</i> n. sp. and <i>Notohymena gangwonensis</i> n. sp. (Ciliophora: Oxytrichidae), from South Korea. <i>The Journal of Eukaryotic Microbiology</i> , 66(5), 740–751. https://doi.org/10.1111/jeu.12718
MK54344 1.1	<i>Pseudoblepharis ma tenue</i>	Heterotrichea	-	Freshwater	Muñoz-Gómez, S. A., Kreutz, M., & Hess, S. (2021). A microbial eukaryote with a unique combination of purple bacteria and green algae as endosymbionts. <i>Science Advances</i> , 7(24), eabg4102. https://doi.org/10.1126/sciadv.abg4102
MK54344 2.1	<i>Condylostomides etoschensis</i>	Heterotrichea	-	Terrestrial	Hines, H. N., McCarthy, P. J., & Esteban, G. F. (2020). First Records of „Flagship‘ Soil Ciliates in North America. <i>Protist</i> , 171(3), 125739. https://doi.org/10.1016/j.protis.2020.125739
MK68852 8.1	<i>Spirostomum caudatum</i>	Heterotrichea	-	Freshwater	Shazib, S. U., Vďačný, P., Kim, J. H., Jang, S. W., & Shin, M. K. (2016). Molecular phylogeny and species delimitation within the ciliate genus <i>Spirostomum</i> (Ciliophora, Postciliodesmatophora, Heterotrichea), using the internal transcribed spacer region. <i>Molecular Phylogenetics & Evolution</i> , 102, 128–144. https://doi.org/10.1016/j.ympev.2016.05.041
MK74943 6.1	<i>Oxytricha seokmoensi</i>	Spirotrichea	Hypotrichia	Terrestrial	Kim, K. S., & Min, G. S. (2019). Morphology and molecular phylogeny of <i>Oxytricha seokmoensis</i> sp. nov. (Hypotrichia: Oxytrichidae), with notes on its morphogenesis. <i>European Journal of Protistology</i> , 71, 125641. https://doi.org/10.1016/j.ejop.2019.125641
MK77546 5.1	<i>Ampullofolliculina lageniformis</i>	Heterotrichea	-	Marine/Brackish	Luo, J., Ma, M., Lu, B., Li, X., Warren, A., Shi, Y., & Chen, X. (2019). The Taxonomy and Phylogeny of the Poorly known Heterotrich Ciliate <i>Ampullofolliculina lageniformis</i> Hadži, 1951 (Ciliophora: Heterotrichea). <i>The Journal of Eukaryotic Microbiology</i> , 66(6), 925–936. https://doi.org/10.1111/jeu.12743
MK79983 8.1	<i>Codonellopsis mobilis</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Wang, R., Song, W., Bai, Y., Warren, A., Li, L., & Hu, X. (2020). Morphological redescrptions and neotypification of two poorly known tintinnine ciliates (Alveolata, Ciliophora, Tintinnina), with a phylogenetic investigation based on SSU rRNA gene sequences. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 70(4), 2515–2530. https://doi.org/10.1099/ijsem.0.004065
MK79983 9.1	<i>Tintinnopsis chinglanensis</i>	Spirotrichea	Choreotrichia	Marine/Brackish	Wang, R., Song, W., Bai, Y., Warren, A., Li, L., & Hu, X. (2020). Morphological redescrptions and neotypification of two poorly known tintinnine ciliates (Alveolata, Ciliophora, Tintinnina), with a phylogenetic investigation based on SSU rRNA gene sequences. <i>International Journal of Systematic & Evolutionary Microbiology</i> , 70(4), 2515–2530. https://doi.org/10.1099/ijsem.0.004065
MK88288 6.1	<i>Chlamyodon pararoseus</i>	Phyllopharyngia	Cyrtophoria	Marine/Brackish	Wang, C., Qu, Z., & Hu, X. (2019). Morphology and SSU rDNA sequences of four cyrtophorian ciliates from China, with description of a new species (Protista, Ciliophora, Phyllopharyngia). <i>Zootaxa</i> , 4664(2), 4664(2), 206–220. https://doi.org/10.11646/zootaxa.4664.2.3

MK95922 7.1	<i>Australothrix linea</i>	Spirotrichea	-	Terrestrial	Jung, J.-H., Omar, A., Kim, K.-S., Kang, S.-C., Kwak, D.-Y., Sun, J.-H., & Min, G.-S. (2019). A study on the non-monophyletic genera <i>Australothrix</i> and <i>Holostichides</i> based on multigene and morphological analyses with a reexamination of type materials (Protozoa: Ciliophora). <i>Molecular Phylogenetics and Evolution</i> , 139, 106538. https://doi.org/10.1016/j.ympev.2019.106538
MK95922 8.1	<i>Holostichides terrae</i>	Spirotrichea	Stichotrichia	Terrestrial	Jung, J.-H., Omar, A., Kim, K.-S., Kang, S.-C., Kwak, D.-Y., Sun, J.-H., & Min, G.-S. (2019). A study on the non-monophyletic genera <i>Australothrix</i> and <i>Holostichides</i> based on multigene and morphological analyses with a reexamination of type materials (Protozoa: Ciliophora). <i>Molecular Phylogenetics and Evolution</i> , 139, 106538. https://doi.org/10.1016/j.ympev.2019.106538
MK95923 0.1	<i>Holostichides obliquocirratu</i>	Spirotrichea	Stichotrichia	Terrestrial	Jung, J.-H., Omar, A., Kim, K.-S., Kang, S.-C., Kwak, D.-Y., Sun, J.-H., & Min, G.-S. (2019). A study on the non-monophyletic genera <i>Australothrix</i> and <i>Holostichides</i> based on multigene and morphological analyses with a reexamination of type materials (Protozoa: Ciliophora). <i>Molecular Phylogenetics and Evolution</i> , 139, 106538. https://doi.org/10.1016/j.ympev.2019.106538
MN15907 0.1	<i>Psilotrichides hawaiiensi</i>	Spirotrichea	-	Terrestrial	Heber, D., Stoeck, T., & Foissner, W. (2014). Morphology and Ontogenesis of <i>Psilotrichides hawaiiensis</i> nov. gen., nov. spec. and Molecular Phylogeny of the Psilotrichidae (Ciliophora, Hypotrichia). <i>Journal of Eukaryotic Microbiology</i> , 61(3), 260-277. https://doi.org/10.1111/jeu.12104
MN16021 2.1	<i>Spirostomum dharwarensis</i>	Heterotrichea	-	Freshwater	Chen, X., Kim, J. H., Shazib, S. U. A., Kwon, C. B., & Shin, M. K. (2017). Morphology and molecular phylogeny of three heterotrichid species (Ciliophora, Heterotrichea), including a new species of <i>Anigsteinia</i> . <i>European Journal of Protistology</i> , 61, A, 278-293. https://doi.org/10.1016/j.ejop.2017.06.005
MN16022 4.1	<i>Epispathidium terricola</i>	Litostomatea	Haptoria	Terrestrial	Alekperov, I. K., & Sadikhova, J. (2006). The Little-Known Free-Living Ciliates from the Soils of Pirculian State Reserve (Eastern Azerbaijan). <i>Turkish Journal of Zoology</i> , 30, 399-403.
MN20448 6.1	<i>Neobakuella aenigmatica</i>	Spirotrichea	-	Marine/Brackish	Moon, J. H., Kim, J. H., Quintela-Alonso, P., & Jung, J. H. (2020). Morphology, Morphogenesis, and Molecular Phylogeny of <i>Neobakuella aenigmatica</i> n. sp. (Ciliophora, Spirotrichea, Bakuellidae). <i>The Journal of Eukaryotic Microbiology</i> , 67(1), 54-65. https://doi.org/10.1111/jeu.12753
MN56769 0.1	<i>Psilotricha sp</i>	Spirotrichea	-	Terrestrial	Luu, H., Quintela-Alonso, P., Sendra, K., Green, I. D., & Esteban, G. F. (2020). Morphology and Phylogeny of the Ciliate <i>Psilotricha silvicola</i> n. sp. (Alveolata, Ciliophora) from Woodland Soils in the United Kingdom. <i>Protist</i> , 171(4), 125752. https://doi.org/10.1016/j.protis.2020.125752

MT17718 9.1	<i>Muranothrix gubernata</i>	Muranotrichea	-	Marine/Brackish	Rotterová, J., Salomaki, E., Pánek, T., Bourland, W., Žihala, D., Táborický, P., Edgcomb, V. P., Beinart, R. A., Kolísko, M., & Čepička, I. (2020). Genomics of New Ciliate Lineages Provides Insight into the Evolution of Obligate Anaerobiosis. <i>Current Biology</i> , 30(11), 2037–2050.e6. https://doi.org/10.1016/j.cub.2020.03.064
MT17719 2.1	<i>Thigmothrix strigos</i>	Muranotrichea	-	Marine/Brackish	Rotterová, J., Salomaki, E., Pánek, T., Bourland, W., Žihala, D., Táborický, P., Edgcomb, V. P., Beinart, R. A., Kolísko, M., & Čepička, I. (2020). Genomics of New Ciliate Lineages Provides Insight into the Evolution of Obligate Anaerobiosis. <i>Current Biology</i> , 30(11), 2037–2050.e6. https://doi.org/10.1016/j.cub.2020.03.064
MT17720 1.1	<i>Parablepharisma sp</i>	Parablepharimea	-	Marine/Brackish	Rotterová, J., Salomaki, E., Pánek, T., Bourland, W., Žihala, D., Táborický, P., Edgcomb, V. P., Beinart, R. A., Kolísko, M., & Čepička, I. (2020). Genomics of New Ciliate Lineages Provides Insight into the Evolution of Obligate Anaerobiosis. <i>Current Biology</i> , 30(11), 2037–2050.e6. https://doi.org/10.1016/j.cub.2020.03.064
U17354.1	<i>Ichthyophthirius multifiliis</i>	Oligohymenophorea	Hymenostomata	Symbiosis	Wright, A. D., & Lynn, D. H. (1995). Phylogeny of the fish parasite <i>Ichthyophthirius</i> and its relatives <i>Ophryoglena</i> and <i>Tetrahymena</i> (Ciliophora, Hymenostomata) inferred from 18S ribosomal RNA sequences. <i>Molecular Biology & Evolution</i> , 12(2), 285–290. https://doi.org/10.1093/oxfordjournals.molbev.a040203
U17355.1	<i>Ophryoglena catenula</i>	Oligohymenophorea	-	Symbiosis	Wright, A. D., & Lynn, D. H. (1995). Phylogeny of the fish parasite <i>Ichthyophthirius</i> and its relatives <i>Ophryoglena</i> and <i>Tetrahymena</i> (Ciliophora, Hymenostomata) inferred from 18S ribosomal RNA sequences. <i>Molecular Biology & Evolution</i> , 12(2), 285–290. https://doi.org/10.1093/oxfordjournals.molbev.a040203
U17356.1	<i>Tetrahymena corlissi</i>	Oligohymenophorea	Hymenostomata	Symbiosis	Hatai, K., Chukanhom, K., Lawhavit, O.-A., Hanjavanit, C., Kunitsune, M., & Imai, S. (2001). Some Biological Characteristics of <i>Tetrahymena corlissi</i> Isolated from Guppy in Thailand. <i>Fish Pathology</i> , 36(4), 195–199.
U47620.1	<i>Eufolliculina uhligi</i>	Heterotrichea	-	Marine/Brackish	Mulisch, M., & Patterson, D. (1983). <i>Eufolliculina uhligi</i> n. sp., a new member of the Folliculinidae (Ciliophora), with some comments on the genus <i>Eufolliculina</i> Hadži. <i>The Journal of Protozoology</i> , 19, 235–243.
U51554.1	<i>Anophryoides haemophila</i>	Oligohymenophorea	-	Symbiosis	Ragan, M. A., Cawthorn, R. J., Despres, B., Murphy, C. A., Singh, R. K., Loughlin, M. B., & Bayer, R. C. (1996). The lobster parasite <i>Anophryoides haemophila</i> (Scuticociliatida: Orchitophryidae): nuclear 18S rDNA sequence, phylogeny and detection using oligonucleotide primers. <i>The Journal of Eukaryotic Microbiology</i> , 43(4), 341–346. https://doi.org/10.1111/j.1550-7408.1996.tb03998.x

U57763.1	<i>Epidinium caudatum</i>	Litostomatea	Trichostomatia	Symbiosis	Wright, A. D., Dehority, B. A., & Lynn, D. H. (1997). Phylogeny of the rumen ciliates <i>Entodinium</i> , <i>Epidinium</i> and <i>Polyplastron</i> (Litostomatea:Entodiniomorpha) inferred from small subunit ribosomal RNA sequences. <i>The Journal of Eukaryotic Microbiology</i> , 44(1), 61–67. https://doi.org/10.1111/j.1550-7408.1997.tb05693.x
U57764.1	<i>Diplodinium dentatum</i>	Litostomatea	Trichostomatia	Symbiosis	Wright, A. D., & Lynn, D. H. (1997). Monophyly of the Trichostome ciliates (Phylum ciliophora: Class litostomatea) tested using new 18S rRNA sequences from the Vestibuliferids, <i>Isotricha intestinalis</i> and <i>Dasytricha ruminantium</i> , and the Haptorian, <i>Didinium nasutum</i> . <i>European Journal of Protistology</i> , 33, 305–315.
U57766.1	<i>Eudiplodinium maggii</i>	Litostomatea	Trichostomatia	Symbiosis	Vdacný, P. (2018). Evolutionary Associations of Endosymbiotic Ciliates Shed Light on the Timing of the Marsupial-Placental Split. <i>Molecular Biology & Evolution</i> , 35(7), 1757–1769. https://doi.org/10.1093/molbev/msy071
U57767.1	<i>Polyplastron multivesiculatum</i>	Litostomatea	Trichostomatia	Symbiosis	Wright, A. D., Dehority, B. A., & Lynn, D. H. (1997). Phylogeny of the rumen ciliates <i>Entodinium</i> , <i>Epidinium</i> and <i>Polyplastron</i> (Litostomatea:Entodiniomorpha) inferred from small subunit ribosomal RNA sequences. <i>The Journal of Eukaryotic Microbiology</i> , 44(1), 61–67. https://doi.org/10.1111/j.1550-7408.1997.tb05693.x
U57768.1	<i>Ophryoscolex purkynjei</i>	Litostomatea	Trichostomatia	Symbiosis	Wright, A. D., & Lynn, D. H. (1997). Monophyly of the Trichostome ciliates (Phylum ciliophora: Class litostomatea) tested using new 18S rRNA sequences from the Vestibuliferids, <i>Isotricha intestinalis</i> and <i>Dasytricha ruminantium</i> , and the Haptorian, <i>Didinium nasutum</i> . <i>European Journal of Protistology</i> , 33, 305–315.
U57769.1	<i>Dasytricha ruminantium</i>	Litostomatea	Trichostomatia	Symbiosis	Wright, A. D., & Lynn, D. H. (1997). Monophyly of the Trichostome ciliates (Phylum ciliophora: Class litostomatea) tested using new 18S rRNA sequences from the Vestibuliferids, <i>Isotricha intestinalis</i> and <i>Dasytricha ruminantium</i> , and the Haptorian, <i>Didinium nasutum</i> . <i>European Journal of Protistology</i> , 33, 305–315.
U57770.1	<i>Isotricha intestinalis</i>	Litostomatea	Trichostomatia	Symbiosis	Wright, A. D., & Lynn, D. H. (1997). Monophyly of the Trichostome ciliates (Phylum ciliophora: Class litostomatea) tested using new 18S rRNA sequences from the Vestibuliferids, <i>Isotricha intestinalis</i> and <i>Dasytricha ruminantium</i> , and the Haptorian, <i>Didinium nasutum</i> . <i>European Journal of Protistology</i> , 33, 305–315.
U57771.1	<i>Didinium nasutum</i>	Litostomatea	Haptoria	Freshwater	Banerji, A., Duncan, A. B., Griffin, J. S., Humphries, S., Petchey, O. L., & Kaltz, O. (2015). Density- and trait-mediated effects of a parasite and a predator in a tri-trophic food web. <i>Journal of Animal Ecology</i> , 84, 723-733. https://doi.org/10.1111/1365-2656.12317

U97108.1	<i>Sulfonecta uniserialis</i>	Armophorea	-	Freshwater	Li, S., Bourland, W. A., Al-Farraj, S. A., Li, L., & Hu, X. (2017). Description of two species of caenomorphid ciliates (Ciliophora, Armophorea): Morphology and molecular phylogeny. <i>European Journal of Protistology</i> , 61(Pt A), 29–40. https://doi.org/10.1016/j.ejop.2017.08.001
U97110.1	<i>Frontonia vernalis</i>	Oligohymenophorea	Peniculia	Freshwater	Serra, V., D'Alessandro, A., Nitla, V., Gammuto, L., Modeo, L., Petroni, G., & Fokim, S. I. (2021). The neotypification of <i>Frontonia vernalis</i> (Ehrenberg, 1833) Ehrenberg, 1838 and the description of <i>Frontonia paravernalis</i> sp. nov. trigger a critical revision of frontoniid systematics. <i>BMC Zoology</i> , 6(4), 1-36. https://doi.org/10.1186/s40850-021-00067-9 . https://doi.org/10.1186/s40850-021-00067-9
U97111.1	<i>Prorodon viridis</i>	Prostomatea	-	Freshwater	Lynn, D. H. (2008). The Ciliated Protozoa: Characterization, classification, and Guide to the Literature, 3 ed. <i>Springer</i> , New York.
U97112.1	<i>Strombidium purpureum</i>	Spirotrichea	Oligotrichia	Marine/Brackish	Foissner, W., Moon-van der Staay, S. Y., van der Staay, G. W. M., Hackstein, J. H. P., Krautgartner, W.-D., & Berger, H. (2004). Reconciling classical and molecular phylogenies in the stichotrichines (Ciliophora, Spirotrichea), including new sequences from some rare species. <i>European Journal of Protistology</i> , 40, 265–281. https://doi.org/10.1016/j.ejop.2004.05.004
Y19166.1	<i>Euplotidium arenarium</i>	Spirotrichea	Hypotrichia	Marine/Brackish	Petroni, G., Spring, S., Schleifer, K. H., Verni, F., & Rosati, G. (2000). Defensive extrusive ectosymbionts of <i>Euplotidium</i> (Ciliophora) that contain microtubule-like structures are bacteria related to <i>Verrucomicrobia</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 97(4), 1813–1817. https://doi.org/10.1073/pnas.030438197
Z29438.1	<i>Trimyema compressum</i>	Plagiopylea	-	Freshwater	Shinzato, N., Watanabe, I., Meng, X. Y., Sekiguchi, Y., Tamaki, H., Matsui, T., & Kamagata, Y. (2007). Phylogenetic analysis and fluorescence <i>in situ</i> hybridization detection of archaeal and bacterial endosymbionts in the anaerobic ciliate <i>Trimyema compressum</i> . <i>Microbial Ecology</i> , 54(4), 627–636. https://doi.org/10.1007/s00248-007-9218-1
Z29440.1	<i>Plagiopyla frontata</i>	Plagiopylea	-	Marine/Brackish	Nitla, V., Serra, V., Fokin, S. I., Modeo, L., Verni, F., Sandeep, B. V., Kalavati, C., & Petroni, G. (2019). Critical revision of the family Plagiopylidae (Ciliophora: Plagiopylea), including the description of two novel species, <i>Plagiopyla ramani</i> and <i>Plagiopyla narasimhamurtii</i> , and redescription of <i>Plagiopyla nasuta</i> Stein, 1860 from India. <i>Zoological Journal of the Linnean Society</i> , 186(1), 1–45. https://doi.org/10.1093/zoolinlean/zly041