

## Checklist of Korean ciliates (Protozoa: Ciliophora)

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After the first record of a Korean ciliate in 1931, more than 130 papers have been published describing Korean ciliates. Of these records, the years 1997, 2012, and 2016 include milestone publications in Korea. Even though the publications provide summarized data about Korean ciliates with relevant literature citations, these publications included two nomenclatural errors, two misspellings, and one misidentification; nine species were transferred to other genera. Furthermore, the type specimens deposited in the laboratory of Prof. Joong Ki Choi (Inha University, Korea) were transferred to the National Marine Biodiversity Institute of Korea (MABIK) because of his retirement. Here, we provide an updated list of 331 Korean species described by 2016 and present information about the type specimens. We also address the aforementioned problems with bringing together scattered data related to ciliate lists.

Keywords: diversity, indigenous species, taxonomy

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### INTRODUCTION

Ciliate (phylum Ciliophora) is one of the most species rich groups in the Protozoa and is found in a variety of habitats from oceans to terrestrial regions (Lynn, 2008). In terms of their diversity, Foissner *et al.* (2008) estimated that the number of ciliate species is more than tens of thousands, and greater than 80% of these remain undescribed.

The first record of a ciliate in Korea was a report of *Balantidium coli* infecting pigs (Huruyama, 1931), and more than 130 ciliate papers have been published since then. During the last 85 plus years, the years 1997, 2012, and 2016 include milestone publications. The Korean Society of Systematic Zoology (1997) reported the first list of the Korean ciliates, and included 94 species. Fifteen years later, the National Institute of Biological Resources (2012) focused on protozoan fauna and published a book of protozoan species lists which included 213 ciliate species. Recently, the Korean Society of Protistologists (2016) published three books describing Korean protozoans with brief morphological descriptions and microphotographs. The books included five chapters of 177 ciliate species (Choi *et al.*, 2016; Jung and Min, 2016; Kim and Choi, 2016; Kim and Lee, 2016; Shin *et*

*al.*, 2016).

Although these publications provided summarized data of Korean ciliates with relevant literature, they included two nomenclatural errors, two misspellings, and one misidentification. In addition, nine species were transferred to other genera.

Furthermore, the type specimens deposited in the laboratory of Prof. Joong Ki Choi (Inha University, Korea) were transferred to the National Marine Biodiversity Institute of Korea (MABIK) because of his retirement. Here, our aims are to provide the information about the type specimens and to address the aforementioned problems.

### Checklist of Korean ciliates

This checklist provides a total of 331 species known by 2016 in Korea (Table 1; Fig. 1). The scientific names are followed by the original publication, the first report (in square brackets), habitat, and remark. If type locality is Korea, an asterisk is denoted after the original publication.

Phylum Ciliophora Doflein, 1901  
Class Armophorea Lynn, 2004

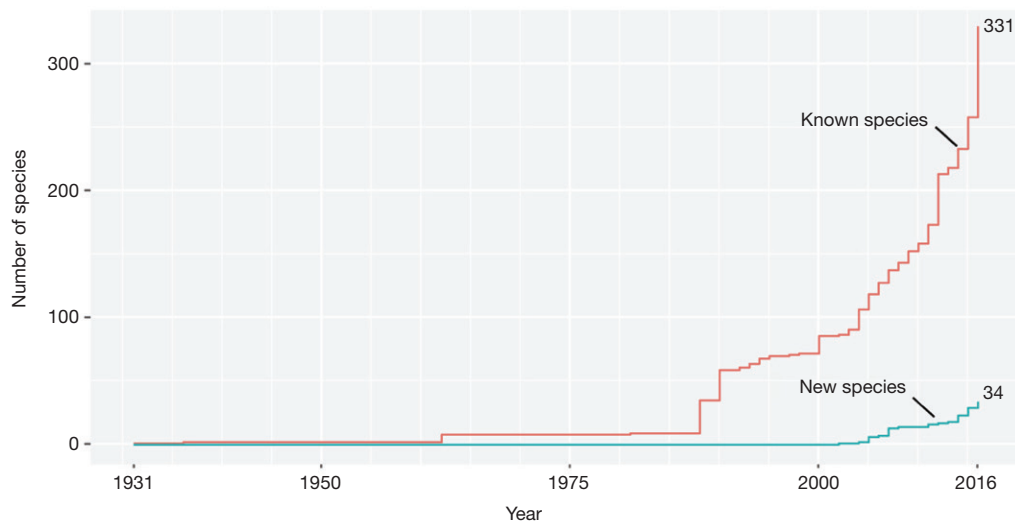


Fig. 1. Plot of the cumulative number of ciliate species in Korea.

Table 1. Number of the ciliate species in Korea.

| Class             | No. of species (new species) |
|-------------------|------------------------------|
| Armophorea        | 1 (0)                        |
| Colpodea          | 7 (0)                        |
| Heterotrichea     | 19 (0)                       |
| Karyorelictea     | 3 (0)                        |
| Litostomatea      | 21 (2)                       |
| Nassophorea       | 6 (1)                        |
| Oligohymenophorea | 25 (3)                       |
| Phyllopharyngea   | 9 (2)                        |
| Plagiopylea       | 1 (1)                        |
| Prostomatea       | 5 (3)                        |
| Spirotrichea      | 234 (22)                     |
| Total             | 331 (34)                     |

1. *Metopus hasei* Sondheim, 1929 [He and Choi, 2015]: Terrestrial.

Class Colpodea Small and Lynn, 1981

2. *Bursaria truncatella* Müller, 1773 [Kim and Min, 2015a]: Terrestrial.
3. *Colpoda cucullus* (Müller, 1773) [Kim *et al.*, 2016a]: Terrestrial.
4. *Colpoda henneguyi* Fabre-Domergue, 1889 [Kim and Min, 2015a]: Terrestrial.
5. *Colpoda inflata* (Stokes, 1884) [Kim *et al.*, 2016a]: Terrestrial.
6. *Colpoda lucida* Greeff, 1888 [Kim and Min, 2015a]: Terrestrial.
7. *Grossglockneria acuta* Foissner, 1980 [Kim and Jung, 2016]: Terrestrial.
8. *Nivaliella plana* Foissner, 1980 [Kim and Jung, 2016]: Terrestrial.

Class Heterotrichea Stein, 1859

9. *Blepharisma hyalinum* Perty, 1849 [Kim and Jung, 2016]: Terrestrial.
10. *Blepharisma musculus* Penard, 1922 [Shazib *et al.*, 2014]: Freshwater. Gene sequences of the Korean population were reported without morphological description.
11. *Blepharisma steini* Kahl, 1932 [Lee and Shin, 2009]: Terrestrial.
12. *Blepharisma undulans* Stein, 1867 [Lee and Shin, 2009]: Freshwater.
13. *Climacostomum virens* (Ehrenberg, 1838) [Kim and Shin, 2015]: Brackish water (2, 10 psu), freshwater.
14. *Condylostoma curva* Burkovsky, 1970 [Kim *et al.*, 2012a]: Coastal water (35 psu).
15. *Condylostoma minutum* Bullington, 1940 [Kim *et al.*, 2012a]: Coastal water (30 psu).
16. *Condylostoma spatiosum* Ozaki and Yagi in Yagi, 1944 [Kim *et al.*, 2012a]: Brackish water (5 psu).
17. *Fabrea salina* Henneguy, 1890 [Kim and Shin, 2015]: Saltern (ca. 200 psu).
18. *Gruberia calkinsi* Beltrán, 1933 [Park and Min, 2016]: Coastal water (salinity unknown).
19. *Spirostomum ambiguum* (Müller, 1786) [Shazib *et al.*, 2014]: Freshwater. Gene sequences of the Korean population were reported at first without morphological description. Since then, Kim *et al.* (2016d) reported a morphology of another population.
20. *Spirostomum caudatum* (Müller, 1786) [Jang *et al.*, 2012]: Freshwater.
21. *Spirostomum minus* Roux, 1901 [Shazib *et al.*, 2014]: Freshwater. Gene sequences of the Korean population were reported at first without morphological description. Since then, Kim *et al.* (2016d)

- reported a morphology of other population.
22. *Spirostomum teres* Claparède and Lachmann, 1858 [Jang *et al.*, 2012]: Freshwater.
  23. *Spirostomum yagiui* Shigenaka, 1959 [Shazib *et al.*, 2016]: Brackish water (6 psu).
  24. *Stentor amethystinus* Leidy, 1880 [Shazib *et al.*, 2014]: Freshwater. Gene sequences of the Korean population were reported without morphological description.
  25. *Stentor coeruleus* (Pallas, 1766) [Shazib *et al.*, 2014]: Brackish water (salinity unknown). Gene sequences of the Korean population were reported without morphological description.
  26. *Stentor muelleri* Ehrenberg, 1831 [Shazib *et al.*, 2014]: Freshwater. Gene sequences of the Korean population were reported without morphological description.
  27. *Stentor roeselii* Ehrenberg, 1835 [Shazib *et al.*, 2014]: Freshwater. Gene sequences of the Korean population were reported without morphological description.
- Class Karyorelictea Corliss, 1974
28. *Loxodes kahli* Dragesco and Njiné, 1971 [Kim *et al.*, 2009]: Estuarine (salinity unknown).
  29. *Loxodes magnus* Stokes, 1887 [Kim *et al.*, 2009]: Freshwater.
  30. *Loxodes vorax* Stokes, 1885 [Kim *et al.*, 2009]: Freshwater.
- Class Litostomatea Small and Lynn, 1981
31. *Amphileptus litonotiformis* Song, 1991 [Kim and Min, 2016]: Coastal water (salinity unknown).
  32. *Balantidium coli* (Malmsten, 1857) [Huruyama, 1931]: Parasitic (intestine?; organ unknown). The specimens were obtained from pigs.
  33. *Buxtonella sulcata* Jameson, 1926 [Lee and Park, 1981]: Parasitic (intestine?; organ unknown). The specimens were obtained from the fecal samples of cows.
  34. *Chaenea mirabilis* Kwon *et al.*, 2014\* [Kwon *et al.*, 2014]: Coastal water (30 psu).
  35. *Cultellothrix coemeterii* (Kahl, 1943) [Kim and Jung, 2016]: Terrestrial.
  36. *Kentrophyllum setigerum* (Quennerstedt, 1867) [Kim and Min, 2016]: Coastal water (14.8 psu).
  37. *Litonotus paracygnus* Song, 1994 [Kim and Min, 2009]: Coastal water (23.0, 23.2 psu).
  38. *Loxophyllum chaetonotum* Borrer, 1965 [Gong *et al.*, 2007a]: Coastal water (20-25 psu).
  39. *Loxophyllum meleagris* (Müller, 1773) [Lee *et al.*, 2006a]: Freshwater.
  40. *Loxophyllum perihoplophorum* Buddenbrock, 1920 [Kim and Min, 2015c]: Coastal water (salinity unknown).
  41. *Loxophyllum pictus* (Gruber, 1884) [Kim and Min, 2009]: Coastal water (salinity unknown). Lin *et al.* (2008) transferred it to genus *Loxophyllum*.
  42. *Loxophyllum rostratum* Cohn, 1866 [Kim and Min, 2015c]: Coastal water (34.2 psu).
  43. *Mesodinium acarus* Stein, 1867 [?]: The first record of the Korean population is not available (Korean Society of Systematic Zoology, 1997; Kwon, 2009).
  44. *Mesodinium coatsi* Nam *et al.*, 2015\* [Nam *et al.*, 2015]: Coastal water (salinity unknown, cultured at 30 psu).
  45. *Mesodinium rubrum* (Lohmann, 1908) [Kim *et al.*, 2003]: Coastal water (30 psu).
  46. *Monilicaryon monilatam* (Stokes, 1886) [Jang *et al.*, 2014]: Freshwater. Gene sequence of the Korean population was reported without morphological description.
  47. *Rimaleptus binucleatus* (Kahl, 1931) [Jang *et al.*, 2014]: Terrestrial.
  48. *Pseudomonilicaryon anguillula* (Kahl, 1931) [Jang *et al.*, 2014]: Terrestrial. Gene sequence of the Korean population was reported without morphological description.
  49. *Siroloxophyllum utriculariae* (Penard, 1922) [Lee *et al.*, 2006a]: Freshwater.
  50. *Trachelius ovum* (Ehrenberg, 1831) [Jang *et al.*, 2014]: Freshwater. Gene sequences of two Korean populations were reported without morphological description.
  51. *Trachelophyllum brachypharynx* Levander, 1894 [Jang *et al.*, 2015]: Brackish water (8 psu).
- Class Nassophorea Small and Lynn, 1981
52. *Drepanomonas hymenofera hymenofera* (Horváth, 1956) [Kim and Jung, 2016]: Terrestrial.
  53. *Furgasonia rubens* Perty, 1852 [Kim and Jung, 2016]: Terrestrial.
  54. *Leptopharynx costatus costatus* Mermod, 1914 [Kim and Jung, 2016]: Terrestrial.
  55. *Obertrumia gracilis* Foissner, 1989 [Kim and Jung, 2016]: Terrestrial.
  56. *Zosterodasys agamaliiev* Deroux, 1978 [Park and Min, 2016]: Brackish water (salinity unknown).
  57. *Zosterodasys minuta* Gong *et al.*, 2007\* [Gong *et al.*, 2007a]: Coastal water (20-25 psu). One paratype slide (MABIK PR00042459) has been deposited in the MABIK.
- Class Oligohymenophorea de Puytorac *et al.*, 1974
58. *Carchesium polypinum* complex [Kim and Shin, 2016]: Freshwater.
  59. *Epistylis chrysemydis* Bishop and Jahn, 1941 [Yoon and Shin, 2004]: Freshwater.

60. *Epistylis entzii* Stiller, 1935 [Yoon and Shin, 2004]: Freshwater.
61. *Epistylis hentscheli* Kahl, 1935 [Cho and Shin, 2003]: Freshwater.
62. *Epistylis plicatilis* Ehrenberg, 1831 [Cho and Shin, 2003]: Freshwater.
63. *Frontonia depressa* (Stokes, 1886) [Kim and Jung, 2016]: Terrestrial.
64. *Myoschiston duplicatum* Precht, 1935 [Sun *et al.*, 2012]: Coastal water (29, 30 psu).
65. *Paramecium aurelia* complex [Kang *et al.*, 1962]: Freshwater.
66. *Paramecium bursaria* (Ehrenberg, 1831) [Kang *et al.*, 1962]: Freshwater.
67. *Paramecium calkinsi* Woodruff, 1921 [Kang *et al.*, 1962]: Freshwater.
68. *Paramecium caudatum* Ehrenberg, 1833 [Kang *et al.*, 1962]: Freshwater.
69. *Paramecium multimicronucleatum* Powers and Mitchell, 1910 [Kang *et al.*, 1962]: Freshwater.
70. *Paramecium putrinum* Claparède and Lachmann, 1859 [Kang *et al.*, 1962]: Freshwater. The Korean population was originally reported as *P. trichium*. It is considered as a junior synonym of *P. putrinum* (Foissner *et al.*, 1994).
71. *Paratetrahymena wassi* Thompson, 1963 [Choi *et al.*, 2016]: Coastal water (salinity unknown).
72. *Paratrichodina obliqua* Lom, 1963 [Choi *et al.*, 2016]: Coastal water (sampling locality and salinity unknown)? Specimens were obtained from the gill of flatfish *Paralichthys olivaceus*.
73. *Pleuronema coronatum* Kent, 1881 [Choi *et al.*, 2016]: Coastal water (salinity unknown).
74. *Pleuronema puytoraci* Grolière and Detcheva, 1974 [Choi *et al.*, 2016]: Coastal water (sampling locality and salinity unknown)?
75. *Pleuronema salmastra* Dragesco, 1986 [Park and Min, 2016]: Coastal water (salinity unknown).
76. *Pseudocohnilembus longisetus* Evans and Thompson, 1964 [Whang *et al.*, 2011]: Coastal water. Specimens were isolated from the diseased black rockfish *Sebastes schlegelii* (salinity unknown). The Korean populations was originally reported as *P. longisetus* Thompson, 1965 (incorrect authorship).
77. *Uronemella parafilificum* Gong *et al.*, 2007\* [Gong *et al.*, 2007a]: Coastal water (20-25 psu). One paratype slide (MABIK PR00042458) has been deposited in the MABIK.
78. *Vorticella campanula* Ehrenberg, 1831 [Kim and Shin, 2016]: Freshwater.
79. *Vorticella convallaria* complex [Moon *et al.*, 2004]: Freshwater.
80. *Zoothamnium arcuatum* Ji *et al.*, 2015\* [Ji *et al.*, 2015]: Brackish water (6-18 psu).
81. *Zoothamnium grossi* Ji *et al.*, 2015\* [Ji *et al.*, 2015]: Brackish water (6-18 psu).
82. *Zoothamnium parahentscheli* Sun *et al.*, 2009 [Ji *et al.*, 2015]: Brackish water (6-18 psu).
- Class Phyllopharyngea de Puytorac *et al.*, 1974
83. *Chlamydodon mnemosyne* Ehrenberg, 1835 [Choi *et al.*, 2016]: Coastal water (salinity unknown).
84. *Chlamydonellopsis calkinsi* (Kahl, 1928) [Choi *et al.*, 2016]: Coastal water (salinity unknown).
85. *Dysteria brasiliensis* Faria *et al.*, 1922 [Park and Min, 2015]: Coastal water (salinity unknown).
86. *Dysteria crassipes* Claparède and Lachmann, 1859 [Park and Min, 2016]: Coastal water (salinity unknown).
87. *Dysteria lanceolata* Claparède and Lachmann, 1859 [Park and Min, 2015]: Coastal water (salinity unknown).
88. *Dysteria nabia* Park and Min, 2014\* [Park and Min, 2014]: Coastal water (18.3-23.4, 30.6 psu).
89. *Dysteria ovalis* (Gourret and Roeser, 1886) [Park and Min, 2015]: Coastal water (32.3 psu).
90. *Phascolodon vorticella* Stein, 1859 [Moon *et al.*, 2004]: Freshwater.
91. *Spirodysteria ganghwaensis* Gong *et al.*, 2007\* [Gong *et al.*, 2007a]: Coastal water (20-25 psu).
- Class Plagiopylea Small and Lynn, 1985
92. *Trimyema koreanum* Cho *et al.*, 2008\* [Cho *et al.*, 2008]: Saltern (293 psu). One paratype slide (MABIK PR00042456) has been deposited in the MABIK.
- Class Prostomatea Schewiakoff, 1896
93. *Balanion masanensis* Kim *et al.*, 2007\* [Kim *et al.*, 2007]: Coastal water (23.3-32.7 psu).
94. *Coleps hirtus* (Müller, 1786) [Choi *et al.*, 2016]: Coastal water (salinity unknown).
95. *Levicoleps biwae jejuensis* Chen *et al.*, 2016\* [Chen *et al.*, 2016]: Freshwater.
96. *Levicoleps taehwae* Chen *et al.*, 2016\* [Chen *et al.*, 2016]: Brackish water (2 psu).
97. *Spathidiopsis socialis* Fabre-Domergue, 1889 [Choi *et al.*, 2016]: Coastal water (salinity unknown).
- Class Spirotrichea Bütschli, 1889
98. *Acanthostomella conicoides* Kofoid and Campbell, 1929 [Lee and Kim, 2000]: Oceanic water (salinity unknown).
99. *Acanthostomella norvegica* (Daday, 1887) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
100. *Actinotricha saltans* Cohn, 1866 [Shin, 2012]: Taehwa River (salinity unknown). Korean population was originally reported as *Oxytricha saltans* (Shin, 2012). However, Shao *et al.* (2011) reactivated the

- genus *Actinotricha* Cohn, 1866.
101. *Afroamphisiella multinucleata* Foissner *et al.*, 2002 [Choi and Shin, 2012]: Coastal water (36 psu).
  102. *Amphisiella annulata* (Kahl, 1932) [Jung and Min, 2009]: Coastal water (29.6 psu).
  103. *Amphorellopsis acuta* (Schmidt, 1901) [Yoo *et al.*, 1988]: Coastal water (salinity unknown).
  104. *Amphorides amphora* (Claparède and Lachmann, 1858) [Yoo *et al.*, 1988]: Coastal water (salinity unknown).
  105. *Amphorides minor* (Jørgensen, 1924) [Yoo and Kim, 1990]: Coastal water (salinity unknown). Synonym of Korean population *Amphorella minor* sensu Yoo (1995) (Kim and Choi, 2016). Strand (1928) replaced *Amphorella* Daday, 1887 with *Amphorides* Strand, 1928.
  106. *Amphorides quadrilineata* (Claparède and Lachmann, 1858) [Yoo and Kim, 1990]: Coastal water (salinity unknown). Synonym of Korean population *Amphorella quadrilineata* sensu Yoo (1995) (Kim and Choi, 2016). For the substitute name of this genus, see *A. minor*.
  107. *Anteholosticha adami* (Foissner, 1982) [Shin, 2012]: Freshwater.
  108. *Anteholosticha distyla* (Buitkamp, 1977) [Kim and Jung, 2016]: Terrestrial.
  109. *Anteholosticha intermedia* (Bergh, 1889) [Shin and Kim, 1993b]: Terrestrial. Korean population was originally reported as *Holosticha multistylata* (Shin and Kim, 1993b) and Berger (2006) synonymized it as *A. intermedia*.
  110. *Anteholosticha monilata* (Kahl, 1928) [Shin, 2012]: Freshwater and terrestrial.
  111. *Anteholosticha multicirrata* Park *et al.*, 2013\* [Park *et al.*, 2013]: Coastal water (34.1 psu).
  112. *Anteholosticha pseudomonilata* Li *et al.*, 2011\* [Li *et al.*, 2011a]: Brackish water (5 psu).
  113. *Anteholosticha pulchra* (Kahl, 1932) [Park *et al.*, 2012]: Coastal water (30.6 psu).
  114. *Apoamphisiella tihanyiensis* (Gellért and Tamás, 1958) [Shin, 2012]: Freshwater.
  115. *Apokeronopsis bergeri* Li *et al.*, 2008 [Jung *et al.*, 2011]: Coastal water (28.5 psu).
  116. *Apokeronopsis ovalis* (Kahl, 1932) [Jung *et al.*, 2011]: Coastal water (30 psu).
  117. *Aponotohymena australis* (Foissner and O'Donoghue, 1990) [Kwon and Shin, 2010]: Freshwater (0.0-0.001 psu). The Korean population was originally reported as *Notohymena australis*. Foissner (2016) transferred *N. australis* to new genus *Aponotohymena* as type species.
  118. *Apoterritricha lutea* Kim *et al.*, 2014\* [Kim *et al.*, 2014]: Terrestrial.
  119. *Arcuseries petzi* (Shao *et al.*, 2011) [Kim *et al.*, 2013]: Coastal water (29 psu); The Korean population was originally reported as *Anteholosticha petzi* and Huang *et al.* (2014) transferred it to new genus *Arcuseries* as type species.
  120. *Ascampbelliella armilla* (Kofoid and Campbell, 1929) [Lee and Kim, 2000]: Oceanic water (salinity unknown).
  121. *Ascampbelliella urceolata* (Ostenfeld, 1899) [Yoo and Kim, 1990]: Coastal water (salinity unknown). Synonym with Korean population *Craterella urceolata* sensu Yoo (1995) (Kim and Choi, 2016). Corliss (1960) replaced *Craterella* Kofoid and Campbell, 1929 with *Ascampbelliella* Corliss, 1960.
  122. *Aspidisca cicada* (Müller, 1786) [Shin and Kim, 1988]: Freshwater.
  123. *Aspidisca leptaspis* Fresenius, 1865 [Li *et al.*, 2010a]: Brackish water (2-20 psu).
  124. *Aspidisca lynceus* (Müller, 1773) [Shin and Kim, 1988]: Freshwater.
  125. *Aspidisca turrata* (Ehrenberg, 1831) [Shin, 1988]: Freshwater.
  126. *Australocirrus shii* (Shi *et al.*, 1997) [Kim *et al.*, 2012b]: Freshwater. The Korean population was originally reported as *Cyrtohymena australis*. Kumar and Foissner (2015) considered the Korean population as a misidentification of *A. shii*.
  127. *Bakuella (Bakuella) incheonensis* Jo *et al.*, 2015\* [Jo *et al.*, 2015]: Brackish water (4.1 psu).
  128. *Bakuella (Pseudobakuella) litoralis* Jo *et al.*, 2015\* [Jo *et al.*, 2015]: Brackish water (15 psu).
  129. *Birojimia soyaensis* Kim *et al.*, 2016\* [Kim *et al.*, 2016b]: Terrestrial.
  130. *Caryotricha minuta* (Xu *et al.*, 2008)\* [Xu *et al.*, 2008]: Coastal water (25-29.5 psu). The Korean population was originally reported as *Kiitricha minuta*. Mao *et al.* (2009) transferred *K. minuta* to the genus *Caryotricha*. One paratype slide (MABIK PR00042448) has been deposited in the MABIK.
  131. *Caudiholosticha sylvatica* (Foissner, 1982) [Shin and Kim, 1993b]: Terrestrial. The Korean population was originally reported as *Holosticha sylvatica*. Berger (2003) transferred it to new genus *Caudiholosticha*.
  132. *Climacocylys digitula* Kofoid and Campbell, 1929 [Lee and Kim, 2000]: Oceanic water (salinity unknown).
  133. *Climacocylys scalaroides* Kofoid and Campbell, 1929 [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  134. *Codonella cratera* (Leidy, 1877) [Moon *et al.*, 2004]: Freshwater.
  135. *Codonellopsis morchella* (Cleve, 1900) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  136. *Codonellopsis nipponica* Hada, 1964 [Yoo *et al.*,

- 1988]: Coastal water (salinity unknown).
137. *Codonellopsis orthoceras* (Haeckel, 1873) [Lee and Kim, 2000]: Oceanic water (salinity unknown).
  138. *Codonellopsis ostenfeldi* (Schmidt, 1901) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  139. *Cyrtohymena citrina* (Berger and Foissner, 1987) [Kim *et al.*, 2012b]: Terrestrial.
  140. *Cyrtohymena muscorum* (Kahl, 1932) [Kim *et al.*, 2012b]: Terrestrial.
  141. *Cyrtohymena primicirrata* (Berger and Foissner, 1987) [Kwon and Shin, 2013]: Freshwater.
  142. *Cyrtostrombidium longisomum* Lynn and Gilron, 1993 [Kim and Lee, 2016]: Coastal water (salinity unknown).
  143. *Dadayiella ganymedes* (Entz, 1884) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  144. *Diaxonella pseudorubra pseudorubra* (Kaltenbach, 1960) [Choi *et al.*, 2011]: Brackish water (2 psu).
  145. *Dictyocysta lepida* Ehrenberg, 1854 [Lee and Kim, 2000]: Oceanic water (salinity unknown). The Korean population was originally reported as *Dictyocysta elegans* var. *lepida* (Kim and Choi, 2016).
  146. *Diophrys appendiculata* (Ehrenberg, 1838) [Kwon *et al.*, 2008]: Coastal water (salinity unknown).
  147. *Diophrys oligothrix* Borror, 1965 [Kwon and Shin, 2006]: Estuarine (salinity unknown).
  148. *Diophrys scutum* (Dujardin, 1841) [Kwon *et al.*, 2008]: Estuarine (salinity unknown).
  149. *Epiplocytilis undella* (Ostenfeld and Schmidt, 1901) [Lee and Kim, 2000]: Oceanic water (salinity unknown).
  150. *Epiplocyloides ralumensis* (Brandt, 1906) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  151. *Epiplocyloides reticulata* (Ostenfeld and Schmidt, 1901) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  152. *Eschaneustyla lugeri* Foissner *et al.*, 2002 [Kim and Min, 2015b]: Terrestrial.
  153. *Euplotes aediculatus* Pierson, 1943 [Shin *et al.*, 1992]: Freshwater.
  154. *Euplotes charon* (Müller, 1773) [Kwon and Shin, 2006]: Estuarine (salinity unknown).
  155. *Euplotes cristatus* Kahl, 1932 [Park *et al.*, 2010]: Coastal water (29 psu).
  156. *Euplotes eurystomus* Wrześniowski, 1870 [Shin and Kim, 1988]: Freshwater.
  157. *Euplotes minuta* Yocom, 1930 [Park *et al.*, 2010]: Coastal water (28.8 psu).
  158. *Euplotes muscicola* Kahl, 1932 [Shin and Kim, 1995]: Freshwater or terrestrial (habitats unknown).
  159. *Euplotes muscorum* Dragesco, 1970 [Jo and Shin, 2003]: Freshwater and terrestrial.
  160. *Euplotes parawoodruffi* Song and Bradbury, 1997 [Kwon *et al.*, 2007]: Estuarine (salinity unknown). Dai *et al.* (2013) suggested that *E. parawoodruffi* as a junior synonym of *E. woodruffi*. However, the small subunit ribosomal RNA (SSU rRNA) gene similarity matrix of Dai *et al.* (2013) showed relatively higher intra-specific variations (maximum of 0.8%) than the congeneric inter-specific ones that might suggest a presence of sibling species within the group *E. woodruffi*-*E. parawoodruffi*. Therefore, here we refrain to synonymize these species.
  161. *Euplotes patella* (Müller, 1773) [Shin and Kim, 1988]: Freshwater.
  162. *Euplotes vannus* (Müller, 1786) [Kwon *et al.*, 2007]: Estuarine (salinity unknown).
  163. *Euplotidium smalli* Lei *et al.*, 2002\* [Lei *et al.*, 2002]: Coastal water (28.9-30.9 psu). Hu and Song (2003) transferred *E. smalli* to genus *Gastrocirrhus*, and National Institute of Biological Resources (2012) and Choi *et al.* (2016) followed the classification. According to Modeo *et al.* (2013), however, the generic separation between *Euplotidium* and *Gastrocirrhus* is not well-defined. Therefore we maintain the assignment of original report until the genus *Gastrocirrhus* is described in detail. One paratype slide (MABIK PR00042443) has been deposited in the MABIK.
  164. *Eutintinnus elegans* (Jørgensen, 1924) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  165. *Eutintinnus fraknoi* (Daday, 1887) [Lee and Kim, 2000]: Oceanic water (salinity unknown).
  166. *Eutintinnus lususundae* (Entz, 1885) [Yoo *et al.*, 1988]: Coastal water (salinity unknown).
  167. *Eutintinnus pectinis* (Kofoid and Campbell, 1929) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  168. *Eutintinnus rectus* (Wailes, 1925) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  169. *Eutintinnus tubulosus* (Ostenfeld, 1899) [Yoo *et al.*, 1988]: Coastal water (salinity unknown).
  170. *Eutintinnus turgescens* (Kofoid and Campbell, 1929) [Lee and Kim, 2000]: Oceanic water (salinity unknown).
  171. *Favella azorica* (Cleve, 1900) [Yoo *et al.*, 1988]: Coastal water (salinity unknown).
  172. *Favella ehrenbergii* (Claparède and Lachmann, 1858) [Yoo *et al.*, 1988]: Coastal water (salinity unknown).
  173. *Foissneridium constrictum* (Meunier, 1910) [Kim and Lee, 2016]: Coastal water (salinity unknown).
  174. *Gastrostyla minima* Hemberger, 1985 [Jo *et al.*, 2005]: Freshwater.
  175. *Gastrostyla setifera* (Engelmann, 1862) [Jo *et al.*, 2005]: Freshwater.
  176. *Gastrostyla steinii* Engelmann, 1862 [Jo *et al.*,

- 2005]: Freshwater.
177. *Gonostomum affine* (Stein, 1859) [Shin and Kim, 1995]: Freshwater or terrestrial (habitats unknown).
178. *Gonostomum algicola* Gellért, 1942 [Kim and Shin, 2006]: Terrestrial.
179. *Gonostomum strenuum* (Engelmann, 1862) [Kim et al., 2016c]: Terrestrial.
180. *Halteria grandinella* (Müller, 1773) [Moon et al., 2004]: Freshwater.
181. *Helicostomella longa* (Brandt, 1906) [Yoo et al., 1988]: Coastal water (salinity unknown).
182. *Helicostomella subulata* (Ehrenberg, 1833) [Yoo et al., 1988]: Coastal water (salinity unknown).
183. *Hemiamphisiella terricola* Foissner, 1988 [Shin and Kim, 1996]: Terrestrial. The Korean population was originally reported as *Strongylidium muscorum*. Foissner (1988) recognized *S. muscorum* sensu Foissner (1984) as a new species and established *H. terricola*. National Institute of Biological Resources (2012) considered the Korean population as a junior synonym of *H. terricola*.
184. *Hemigastrostyla enigmatica* (Dragesco and Dragesco-Kernéis 1986) [Gong et al., 2007b]: Coastal water (20-25 psu).
185. *Hemigastrostyla paraenigmatica* Shao et al., 2011 [Choi et al., 2016]: Coastal water (salinity unknown).
186. *Hemiurosomoida longa* (Gelei and Szabados, 1950) [Kwon and Shin, 2004]: Freshwater. The Korean population was originally reported as *Oxytricha longa*. Singh and Kamra (2015) transferred *O. longa* to new genus *Hemiurosomoida* as type species.
187. *Heterotachysoma multinucleatum* (Gong and Choi, 2007)\* [Gong and Choi, 2007]: Coastal water (salinity unknown). The Korean population was originally reported as *Tachysoma multinucleata*. Li et al. (2010b) emended it as *Tachysoma multinucleatum*. Shao et al. (2013) transferred it to *Heterotachysoma*. One paratype slide (MABIK PR00042444) has been deposited in the MABIK. Incorrect names: *Heterotachysoma multinucleata* by National Institute of Biological Resources (2012); *Heterotachysoma multinucleate* by Choi et al. (2016).
188. *Histiculus histicus* (Müller, 1773) [Kwon and Shin, 2011]: Freshwater.
189. *Holosticha diademata* (Rees, 1884) [Choi, 2015]: Coastal water (salinity unknown).
190. *Holosticha hamulata* Lei et al., 2005\* [Lei et al., 2005b]: Coastal water (18-33 psu). Three paratype slides (MABIK PR00042445-PR00042447) has been deposited in the MABIK.
191. *Holosticha heterofoissneri* Hu and Song, 2001 [Lei et al., 2005b]: Coastal water (18-33 psu).
192. *Holostichides chardezi* Foissner, 1987 [Kwon and Shin, 2005]: Terrestrial.
193. *Lamtostyla granulifera* Foissner, 1997 [Kim et al., 2016c]: Terrestrial.
194. *Laurentiella strenua* (Dingfelder, 1962) [Kwon and Shin, 2010]: Freshwater (0-0.001 psu).
195. *Limnostrombidium viride* (Stein, 1867) [Moon et al., 2004]: Freshwater.
196. *Lohmanniella oviformis* Leegaard, 1915 [Kim and Lee, 2016]: Coastal water (salinity unknown).
197. *Lynnella semiglobulosa* Liu et al., 2011 [Kim and Lee, 2016]: Coastal water (salinity unknown).
198. *Metacyclis corbula* Kofoid and Campbell, 1929 [Yoo et al., 1988]: Coastal water (salinity unknown).
199. *Metagonostomum gonostomoidum* (Hemberger, 1985) [Kim and Shin, 2006]: Terrestrial. The Korean population was originally reported as *G. gonostomoida*. Berger (2011) emended the species-group name of *G. gonostomoida* to *G. gonostomoidum*. Foissner (2016) transferred it to new genus *Metagonostomum* as type species.
200. *Metaurostylopsis cheni* Chen et al., 2011 [Kim et al., 2016c]: Coastal water (21 psu).
201. *Metaurostylopsis marina* (Kahl, 1932) [Lei et al., 2005a]: Coastal water (31-32 psu).
202. *Metaurostylopsis salina* Lei et al., 2005\* [Lei et al., 2005a]: Coastal water (ca. 31, 51.3-58.4 psu). Two paratype slides (MABIK PR00042449, MABIK PR00042450) has been deposited in the MABIK.
203. *Metaurostylopsis songi* Lei et al., 2005\* [Lei et al., 2005a]: Coastal water (ca. 31 psu). Two paratype slides (MABIK PR00042451, MABIK PR00042452) has been deposited in the MABIK.
204. *Metaurostylopsis struederkypkeae* Shao et al., 2008 [Park et al., 2012]: Brackish water (14.8 psu).
205. *Monomicrocaryon balladyna* (Song and Wilbert, 1989) [Kwon and Shin, 2004]: Terrestrial. The Korean population was originally reported as *Oxytricha balladyna*. Foissner (2016) transferred *O. balladyna* to new genus *Monomicrocaryon*.
206. *Neobakuella flava* Li et al., 2011\* [Li et al., 2011b]: Brackish water (13 psu).
207. *Notohymena antarctica* Foissner, 1996 [Kim and Jung, 2016]: Terrestrial.
208. *Novistrombidium (Propecingulum) ioanum* (Lynn and Gilron, 1993) [Kim and Lee, 2016]: Coastal water (salinity unknown).
209. *Omegastrombidium kahli* Song et al., 2009 [Lee et al., 2011]: Coastal water (ca. 27-33 psu from their fig. 5).
210. *Orthoamphisiella stramenticola* Eigner and Foissner, 1991 [Shin, 1998]: Terrestrial.
211. *Oxytricha auripunctata* Blatterer and Foissner, 1988 [Kim and Min, 2015b]: Terrestrial.
212. *Oxytricha granulifera* Foissner and Adam, 1983

- [Kwon and Shin, 2013]: Terrestrial.
213. *Oxytricha fallax* Stein, 1859 [Shin and Kim, 1993a]: Freshwater. The Korean population was originally reported as *O. hymenostoma*. According to Berger (1999), the Korean population has distinctly larger than type population, thus he classified it as *O. fallax*.
  214. *Oxytricha oxymarina* Berger, 1999 [Kwon and Shin, 2008]: Estuarine (1.45 psu). The Korean population was originally reported as *O. marina*. Berger (1999) renamed *Oxytricha (Oxytricha) marina* Kahl, 1932 to avoid a homonym with *Oxytricha (Steinia) marina* Kahl, 1932.
  215. *Oxytricha proximata* Shibuya, 1930 [He and Choi, 2015]: Terrestrial.
  216. *Oxytricha rubripuncta* Berger and Foissner, 1987 [Shin, 1994]: Terrestrial.
  217. *Oxytrichella mahadjacola* Foissner, 2016 [Kim and Jung, 2016]: Terrestrial.
  218. *Parafavella denticulata* (Ehrenberg, 1840) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  219. *Parafavella gigantea* (Brandt, 1896) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  220. *Paraholosticha muscicola* (Kahl, 1932) [Shin, 1994]: Terrestrial. The Korean population was originally reported as *Keronopsis muscicola*. The Korean population slightly differs from the original description and recent redescrptions (Jung *et al.*, 2015b; Xu *et al.*, 2016) that might imply a sibling species or misidentification. Incorrect names: *Keronopsis muscicola* (Korean Society of Systematic Zoology, 1997; National Institute of Biological Resources, 2012); *Paraholosticha muscicola* (National Institute of Biological Resources, 2012).
  221. *Parallelostrombidium paralatam* Xu *et al.*, 2006 [Choi *et al.*, 2016]: Coastal water (salinity unknown).
  222. *Paramphisiella acuta* (Foissner, 1982) [Shin, 1998]: Terrestrial. The Korean population was originally reported as *Amphisiella acuta*. Foissner (1988) transferred *A. acuta* to new genus *Paramphisiella* as type species.
  223. *Paramphisiella caudata* (Hemberger, 1985) [Shin, 1994]: Terrestrial. The Korean population was originally reported as *Uroleptoides caudata*. Foissner (1988) transferred *U. caudata* to new genus *Paramphisiella*.
  224. *Paratontonia poopsia* (Montagnes and Lynn, 1988) [Kim and Lee, 2016]: Coastal water (salinity unknown).
  225. *Parasterkiella thompsoni* (Foissner, 1996) [Kwon and Shin, 2011]: Brackish water (salinity unknown). The Korean population was originally reported as *Sterkiella thompsoni*. Küppers *et al.* (2011) transferred *S. thompsoni* to new genus *Parasterkiella* as type species.
  226. *Parastrombidinopsis shimi* Kim *et al.*, 2005\* [Kim *et al.*, 2005]: Coastal water (24.7-31.4 psu).
  227. *Paraurostyla weissei* complex [Shin and Kim, 1988]: Freshwater.
  228. *Parentocirrus hortualis* Voß, 1997 [Shin, 2012]: Terrestrial.
  229. *Paroxytricha longigranulosa* (Berger and Foissner, 1989) [Kwon and Shin, 2008]: Terrestrial. The Korean population was originally reported as *Oxytricha longigranulosa*. Foissner (2016) transferred it to new genus *Paroxytricha*.
  230. *Parundella caudata* (Ostenfeld, 1899) [Lee and Kim, 2000]: Oceanic water (salinity unknown).
  231. *Paruroleptus caudatus* (Stokes, 1886) [Shin, 1994]: Freshwater and terrestrial.
  232. *Pelagostrobilidium kimaie* Agatha and Strüder-Kypke, 2014\* [Lee *et al.*, 2011]: Coastal water (ca. 26-35 psu from fig. 3 of Lee *et al.*, (2011)). The Korean population was originally reported as *Rimostrombidium conicum*. Agatha and Strüder-Kypke (2014) considered the Korean population as a new species and established *P. kimaie*.
  233. *Pelagostrobilidium simile* Song and Bradbury, 1998 [Ma and Choi, 2005]: Coastal water (salinity unknown).
  234. *Pelagostrobilidium spirale* (Leegaard, 1915) [Kim and Lee, 2016]: Coastal water (salinity unknown).
  235. *Pelagostrombidium fallax* (Zacharias, 1895) [Moon *et al.*, 2004]: Freshwater.
  236. *Periholosticha paucicirrata* Foissner *et al.*, 2005 [Kim and Jung, 2016]: Terrestrial.
  237. *Phacodinium metchnicoffi* Certes, 1891 [Shin *et al.*, 2000]: Terrestrial. Gene sequence of a Korean population was reported without morphological description. Since then, Kim and Jung (2016) described briefly another Korean population.
  238. *Ponturostyla enigmatica* (Dragesco and Dragesco-Kernéis 1986) [Kim *et al.*, 2013]: Coastal water (34.1 psu).
  239. *Protocruzia contrax* Mansfeld, 1923 [Choi *et al.*, 2016]: Coastal water (salinity unknown).
  240. *Protogastrostyla pulchra* Gong *et al.*, 2007\* [Gong *et al.*, 2007b]: Coastal water (30 psu).
  241. *Protorhabdonella curta* (Cleve, 1901) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  242. *Protorhabdonella simplex* (Cleve, 1900) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  243. *Protorhabdonella striatura* Kofoid and Campbell, 1929 [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  244. *Pseudoamphisiella alveolata* (Kahl, 1932) [Jung and Min, 2009]: Coastal water (29.6 psu).
  245. *Pseudocyrtohymena koreana* Jung *et al.*, 2015\* [Jung *et al.*, 2015a]: Brackish water (5 psu).



246. *Pseudokahliella marina* (Foissner *et al.*, 1982) [Choi and Shin, 2012]: Coastal water (31 psu).
247. *Pseudokeronopsis carnea* (Cohn, 1866) [Baek *et al.*, 2011]: Coastal water (28.5 psu).
248. *Pseudokeronopsis flava* (Cohn, 1866) [Choi *et al.*, 2011]: Estuarine (20 psu).
249. *Pseudokeronopsis rubra* (Ehrenberg, 1836) [Shin, 2012]: Taehwa River (salinity unknown).
250. *Pseudotontonia simplicidens* (Lynn and Gilron, 1993) [Kim and Lee, 2016]: Coastal water (salinity unknown).
251. *Pseudostrombidium planctonicum* Horváth, 1933 [Moon *et al.*, 2004]: Freshwater. The Korean population was originally reported as *P. planktonicum* (incorrect name) (National Institute of Biological Resources, 2012).
252. *Pseudouroleptus jejuensis* Jung *et al.*, 2014\* [Jung *et al.*, 2014]: Terrestrial.
253. *Pseudourostyla cristata* (Jerka-Dziadosz, 1964) [Choi and Shin, 2000]: Terrestrial.
254. *Pseudourostyla cristatoides* Jung *et al.*, 2012\* [Jung *et al.*, 2012]: Brackish water (3-5 psu).
255. *Pseudourostyla levis* Takahashi, 1973 [Choi and Shin, 2000]: Terrestrial.
256. *Ptychocylis obtusa* Brandt, 1896 [Yoo and Kim, 1990]: Coastal water (salinity unknown).
257. *Rhabdonella poculum* (Ostenfeld and Schmidt, 1901) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
258. *Rhabdonella spiralis* (Fol, 1881) [Lee and Kim, 2000]: Oceanic water (salinity unknown).
259. *Rhabdonella valdestriata* Brandt, 1906 [Yoo and Kim, 1990]: Coastal water (salinity unknown). The Korean population was originally reported as *Rhabdonella striata*; misidentification of *R. valdestriata* (Kim and Choi, 2016). Alder (1999) classified *R. striata* as a junior synonym of *R. spiralis*.
260. *Rhizodorus tagatzi* Strelkow and Wirketis, 1950 [Yoo *et al.*, 1988]: Coastal water (salinity unknown). The Korean population was originally reported as *Tintinnopsis corniger* (Kim and Choi, 2016). Saccà *et al.* (2012) suggested that *T. corniger* as a junior synonym of *R. tagatzi*.
261. *Rigidocortex octonucleatus* (Foissner, 1988) [Kwon and Shin, 2005]: Terrestrial.
262. *Rigidohymena quadrinucleata* (Dragesco and Njiné, 1971) [Shin and Kim, 1996]: Terrestrial. The Korean population was originally reported as *Steinia quadrinucleata*. Foissner (1989) transferred *S. quadrinucleata* to the genus *Cyrtohymena*. Since then, Berger (2011) transferred it to the new genus *Rigidohymena*.
263. *Rimostrombidium brachykinetum* Krainer, 1995 [Moon *et al.*, 2004]: Freshwater.
264. *Rimostrombidium caudatum* (Kahl, 1932) [Choi *et al.*, 2016]: Coastal water (salinity unknown).
265. *Rimostrombidium hyalinum* (Mirabdullajev, 1985) [Moon *et al.*, 2004]: Freshwater.
266. *Rimostrombidium multinucleatum* (Lynn and Montagnes, 1988) [Kim and Lee, 2016]: Coastal water (salinity unknown).
267. *Rimostrombidium lacustris* (Foissner *et al.*, 1988) [Moon *et al.*, 2004]: Freshwater.
268. *Rimostrombidium orientale* Song and Bradbury, 1998 [Lee *et al.*, 2006b]: Coastal water (15.1-32.6 psu).
269. *Rimostrombidium veniliae* (Montagnes and Taylor, 1994) [Lee *et al.*, 2006b]: Coastal water (15.1-32.6 psu).
270. *Rubrioxytricha haematoplasma* (Blatterer and Foissner, 1990) [Shin and Kim, 1993a]: Freshwater. The Korean population was originally reported as *Oxytricha haematoplasma*. Berger (1999) transferred *O. haematoplasma* to new genus *Rubrioxytricha*.
271. *Salpingella acuminata* (Claparède and Lachmann, 1858) [Yoo and Kim, 1990]: Oceanic and coastal waters (salinity unknown). Kim and Choi (2016) considered that the Korean population *Salpingella acuminata* var. *undata* sensu Lee and Kim (2000) as a synonym of *S. acuminata*.
272. *Salpingella laminata* Kofoid and Campbell, 1939 [Yoo *et al.*, 1988]: Coastal water (salinity unknown).
273. *Salpingella subconica* Kofoid and Campbell, 1929 [Yoo and Kim, 1990]: Coastal water (salinity unknown).
274. *Saudithrix terricola* Foissner *et al.* in Berger *et al.*, 2006 [Kim and Jung, 2016]: Terrestrial.
275. *Schmidingerella arcuata* (Brandt, 1906) [Yoo *et al.*, 1988]: Coastal water (salinity unknown). The Korean population was originally reported as *Favella taraikaensis*. Agatha and Strüder-Kypke (2012) transferred *F. arcuata* to new genus *Schmidingerella* as type species, and they refrained to synonymize *S. taraikaensis* as a junior synonym of *S. arcuata*. Kim and Choi (2016) synonymized Korean populations of *F. taraikaensis* as *S. arcuata*.
276. *Spiroamphisiella hembergeri* Li *et al.*, 2007 [Xu and Lei, 2007]: Coastal water (ca. 31.5 psu). The Korean population was originally reported as *Metastrongylidium distichum*; junior synonym of *S. hembergeri* Li *et al.*, 2007 because of precedence of names by first reviser according to the ICZN (Berger, 2008).
277. *Spirotontonia grandis* (Suzuki and Han, 2000) [Suzuki and Han, 2000]: Oceanic (salinity unknown). The Korean population was originally reported as *Tontonia grandis*. Agatha (2004) established new

- genus *Spirotontonia* and transferred *T. grandis* to the new genus as type species.
278. *Spirotontonia turbinata* (Song and Bradbury, 1998) [Lee *et al.*, 2011]: Coastal water (30.30-32.60, 30.30-31.51 psu).
  279. *Steenstrupiella steenstrupii* (Claparède and Lachmann, 1858) [Yoo and Kim, 1990]: Oceanic and coastal waters (salinity unknown). The Korean population was originally reported as *S. robusta*. Kim and Choi (2016) synonymized the Korean populations of *S. robusta* (Yoo and Kim, 1990) and *S. steenstrupii* var. *robusta* (Lee and Kim, 2000) as *S. steenstrupii*.
  280. *Stenosemella nivalis* (Meunier, 1910) [Yoo and Kim, 1990]: Coastal water (salinity unknown).
  281. *Stenosemella pacifica* Kofoid and Campbell, 1929 [Yoo *et al.*, 1988]: Coastal water (salinity unknown).
  282. *Stenosemella parvicollis* (Marshall, 1934) [Yoo *et al.*, 1988]: Coastal water (salinity unknown).
  283. *Sterkiella cavicola* (Kahl, 1935) [Shin and Kim, 1994]: Terrestrial. The Korean population was originally reported as *Histiculus cavicola*. Foissner *et al.* (1991) transferred *H. cavicola* to new genus *Sterkiella* as type species.
  284. *Sterkiella histriomuscorum* (Foissner *et al.*, 1991) [Shin and Kim, 1994]: Terrestrial. The Korean population was originally reported as *Histiculus muscorum* (basionym: *Oxytricha (Histrio) muscorum* Kahl, 1932). Foissner *et al.* (1991) provided the replacement name *Oxytricha histriomuscorum* from *Oxytricha (Histrio) muscorum* because of homonyms, and transferred it to new genus *Sterkiella*.
  285. *Strobilidium caudatum* (Fromentel, 1876) [Moon *et al.*, 2004]: Freshwater.
  286. *Strombidinopsis acuminata* Fauré-Fremiet, 1924 [Kim *et al.*, 2010]: Coastal water (32 psu).
  287. *Strombidinopsis chilorhax* Lynn *et al.*, 1991 [Kim and Lee, 2016]: Coastal water (salinity unknown).
  288. *Strombidinopsis elongata* Song and Bradbury, 1998 [Kim and Lee, 2016]: Coastal water (salinity unknown).
  289. *Strombidinopsis jeokjo* Jeong *et al.*, 2004\* [Jeong *et al.*, 2004]: Coastal water (11.4-30.5 psu).
  290. *Strombidinopsis minima* (Gruber, 1884) [Choi *et al.*, 2016]: Coastal water (27.0-29.5 psu).
  291. *Strombidium bilobum* Lynn and Gilron, 1993 [Lee *et al.*, 2012]: Coastal water (9-34 psu).
  292. *Strombidium capitatum* (Leegaard, 1915) [Kim *et al.*, 2008]: Coastal water (17.1-32.9 psu).
  293. *Strombidium compressum* (Leegaard, 1915) [Kim and Lee, 2016]: Coastal water (salinity unknown).
  294. *Strombidium dalum* Lynn *et al.*, 1988 [Lee *et al.*, 2012]: Coastal water (9-34 psu).
  295. *Strombidium emergens* (Leegaard, 1915) [Lee *et al.*, 2012]: Coastal water (27-28, 31 psu).
  296. *Strombidium epidemum* Lynn *et al.*, 1988 [Lee *et al.*, 2012]: Coastal water (2-34 psu).
  297. *Strombidium paracalkinsi* (Lei *et al.*, 1999) [Lee *et al.*, 2015]: Coastal water (30 psu).
  298. *Strombidium pollostomum* Lynn and Gilron, 1993 [Lee *et al.*, 2012]: Coastal water (9-34 psu).
  299. *Strombidium styliifer* Levander, 1894 [Kim and Lee, 2016]: Coastal water (salinity unknown).
  300. *Strombidium sulcatum* Claparède and Lachmann, 1858 [Kim and Lee, 2016]: Coastal water (salinity unknown).
  301. *Strombidium tressum* Lynn *et al.*, 1988 [Lee *et al.*, 2012]: Coastal water (2-34 psu).
  302. *Stylonychia ammermanni koreana* Kumar *et al.*, 2016\* [Kumar *et al.*, 2016]: Freshwater.
  303. *Stylonychia mytilus* complex [Shin and Kim, 1988]: Freshwater.
  304. *Stylonychia pustulata* (Müller, 1786) [Shin and Kim, 1988]: Freshwater.
  305. *Tachysoma pellionellum* (Müller, 1773) [Shin and Kim, 1993a]: Freshwater.
  306. *Tintinnidium primitivum* Busch, 1923 [Kim and Choi, 2016]: Coastal water (salinity unknown).
  307. *Tintinnopsis baltica* Brandt, 1896 [Kim and Choi, 2016]: Coastal water (salinity unknown).
  308. *Tintinnopsis beroidea* Stein, 1867 [Yoo *et al.*, 1988]: Coastal water (salinity unknown). Yoo *et al.* (1988) reported *T. angustior* and *T. beroidea*. Taniguchi (1997) synonymized *T. angustior* as a junior synonym of *T. beroidea*, and National Institute of Biological Resources (2012) followed the classification.
  309. *Tintinnopsis campanula* (Ehrenberg, 1840) [Yoo *et al.*, 1988]: Coastal water (salinity unknown). The Korean population was originally reported as *Tintinnopsis butschlii* and synonymized as *T. campanula* (National Institute of Biological Resources, 2012). Alder (1999) synonymized *T. butschlii* as a junior synonym of *T. campanula*.
  310. *Tintinnopsis cratera* (Leidy, 1877) [Hada, 1936]: Freshwater.
  311. *Tintinnopsis cylindrica* Daday, 1887 [Yoo *et al.*, 1988]: Coastal water (salinity unknown). The Korean population was originally reported as *T. kofoidi*. Agatha and Riedel-Lorjé (2006) synonymized *T. kofoidi* as a junior synonym of *T. cylindrica*.
  312. *Tintinnopsis dadayi* Kofoid, 1905 [Yoo *et al.*, 1988]: Coastal water (salinity unknown). The Korean populations was originally reported as *Tintinnopsis directa*. Taniguchi (1997) synonymized *T. directa* as a junior synonym of *T. dadayi*.
  313. *Tintinnopsis lobiancoi* Daday, 1887 [Yoo *et al.*, 1988]: Oceanic and coastal waters (salinity un-

- known). The Korean population was originally reported as *T. tubulosoides* and synonymized as *T. lobiancoi* by National Institute of Biological Resources (2012), which followed the classification of Bakker and Phaff (1976).
314. *Tintinnopsis lohmanni* Laackmann, 1906 [Yoo *et al.*, 1988]: Coastal water (salinity unknown).
315. *Tintinnopsis neriticus* (Campbell, 1926) [Yoo *et al.*, 1988]: Coastal water (salinity unknown). The Korean population was originally reported as *Leprotintinnus neriticus* and synonymized as *T. neriticus* (National Institute of Biological Resources, 2012). Alder (1999) classified *Tintinnopsis* and *Leprotintinnus* as *Tintinnopsis* complex.
316. *Tintinnopsis nordqvisti* Brandt, 1906 [Yoo *et al.*, 1988]: Coastal water (salinity unknown). The Korean population was originally reported as *Leprotintinnus nordqvisti* and synonymized as *T. nordqvisti* (National Institute of Biological Resources, 2012). For nomenclature see *T. neriticus*.
317. *Tintinnopsis parvula* Jörgensen, 1912 [Yoo *et al.*, 1988]: Coastal water (salinity unknown). The Korean population was originally reported as *T. gracilis*. Kim and Choi (2016) synonymized the Korean population as *T. parvula*. Alder (1999) synonymized *T. gracilis* as a junior synonym of *T. parvula*.
318. *Tintinnopsis radix* (Imhof, 1886) [Yoo *et al.*, 1988]: Coastal water (salinity unknown).
319. *Tintinnopsis simplex* (Schmidt, 1901) [Yoo *et al.*, 1988]: Coastal water (salinity unknown). The Korean population was originally reported as *Leprotintinnus simplex*. For details, see *Tintinnopsis neriticus*.
320. *Tintinnopsis tocantinensis* Kofoid and Campbell, 1929 [Yoo *et al.*, 1988]: Coastal water (salinity unknown).
321. *Tunicothrix rostrata* Xu *et al.*, 2006\* [Xu *et al.*, 2006]: Coastal water (31 psu). One paratype slide (MABIK PR00042457) has been deposited in the MABIK.
322. *Undella claparedei* (Entz, 1885) [Yoo and Kim, 1990]: Coastal water (salinity unknown). Kim and Choi (2016) synonymized the Korean population of *Undella perpusilla* (Yoo and Kim, 1990) as *U. claparedei*. Alder (1999) reported 'Undella claparedei group' composed of *U. claparedei*, *U. globosa*, *U. perpusilla*, *U. subacuta*, and *U. subcaudata* because of continuous morphological transitions between them.
323. *Uroleptopsis citrina* Kahl, 1932 [Baek *et al.*, 2011]: Coastal water (32.3 psu).
324. *Uroleptus lepisma* (Wenzel, 1953) [Shin *et al.*, 1992]: Freshwater. The Korean population was originally reported as *Paruroleptus lepisma* Wenzel, 1953 (basonym: *Holosticha* (*Paruroleptus*) *lepisma* Wenzel, 1953). Foissner (1998) transferred it to *Uroleptus*.
325. *Uronychia binucleata* Young, 1922 [Kim and Min, 2011]: Coastal water (salinity unknown).
326. *Uronychia multicirrus* Song, 1997 [Kim and Min, 2011]: Coastal water (salinity unknown).
327. *Uronychia setigera* Calkins, 1902 [Kim and Min, 2011]: Coastal water (salinity unknown).
328. *Urosoma caudata* (Ehrenberg, 1833) [Shin, 2012]: Freshwater.
329. *Urosoma emarginata* (Stokes, 1885) [Shin, 2012]: Terrestrial.
330. *Urosomoida agiliformis* Foissner, 1982 [He and Choi, 2015]: Terrestrial.
331. *Urostyla grandis* Ehrenberg, 1830 [Shin, 1994]: Freshwater and terrestrial.

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