

Nomenclature changes in the flatworms (Platyhelminthes)

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ABSTRACT: Four junior homonyms were detected amongst the genera of Platyhelminthes and the following replacement names are proposed: *Emprostiotrema* Cianferoni et Ceccolini nom.n. pro *Atractotrema* Goto et Ozaki, 1929 nec Cossmann, 1888 and consequently the new family name Emprostiotrematidae Cianferoni et Ceccolini nom.n. pro Atractotrematidae Yamaguti, 1939; *Aristeraclelandia* Ceccolini et Cianferoni nom.n. pro *Clelandia* Johnston, 1909 nec Cossmann, 1902; *Pseudosemeniella* Ceccolini et Cianferoni nom.n. pro *Semeniella* Spasskij, 1951 nec Obenberger, 1924; *Turdifernandezia* Ceccolini et Cianferoni nom.n. pro *Fernandezia* López-Neyra, 1936 nec Hyatt et Pilsbry, 1911. The genus *Opepherotrematoides* Yamaguti, 1970 is revalidated. Seven new combinations (comb.n.) are stated.

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KEY WORDS: combinatio nova, nomen novum, Platyhelminthes, replacement name, resurrected name.

Изменения в номенклатуре плоских червей (Platyhelminthes)

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РЕЗЮМЕ: Среди родов Platyhelminthes обнаружено четыре младших омонима, в этой связи предлагаются следующие замещающие названия: *Emprostiotrema* Cianferoni et Ceccolini nom.n. для *Atractotrema* Goto et Ozaki, 1929 не входившие в состав Cossmann, 1888 и, следовательно, новое название семейства Emprostiotrematidae Cianferoni et Ceccolini nom.n. для Atractotrematidae Yamaguti, 1939; *Aristeraclelandia* Ceccolini et Cianferoni nom.n. для *Clelandia* Johnston, 1909, не входившие в состав

Cossmann, 1902; *Pseudosemenoviella* Ceccolini et Cianferoni nom.n. для *Semenoviella* Spasskij, 1951, не входившие в состав Obenberger, 1924; *Turdifernandezia* Ceccolini et Cianferoni nom.n. для *Fernandezia* Lypez-Neyra, 1936 не входившие в состав Hyatt et Pilsbry, 1911. Род *Opepherotrematoides* Yamaguti, 1970 повторно валидирован. Заявлено семь новых комбинаций (comb.n.).

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КЛЮЧЕВЫЕ СЛОВА: новая комбинация (combinatio nova), новое имя (nomen novum), Platyhelminthes, заменяющее имя (replacement name), воскрешённое имя (resurrected name).

Introduction

Platyhelminthes Claus, 1887 (for the choice of the correct spelling see Ehlers, Sopott-Ehlers, 1995) is a large phylum including about 30000 species (Zhang, 2013). It has been recently revised, removing from it the species currently considered belonging to the phylum Xenacoelomorpha Philippe *et al.*, 2011 (see Egger *et al.*, 2009; Philippe *et al.*, 2011). Within Platyhelminthes there are several genera whose names are junior homonyms, not recognized as such thus far. Therefore, according to the International Code of Zoological Nomenclature (ICZN, 1999), new replacement names are needed for them. The following new names proposed in this work allow to solve in part the confusion between the nomenclature of platyhelminths and other zoological groups.

The platyhelminth classification adopted is mainly in agreement with Egger *et al.* (2015) and Tyler *et al.* (2006–2021).

Systematic part

Replacement names

I.

Subphylum RHABDITOPHORA

Ehlers, 1985

Class TREMATODA Rudolphi, 1808

Order PLAGIORCHIIDA La Rue, 1957

Family ATRACTOTREMATIDAE

Yamaguti, 1939 (to be replaced, see below)

In his work about Eocene molluscs Cossmann (1888: 31) established the name *Atractotrema*

as “new section” of *Fissurella* Bruguière, 1789; currently the name is an accepted genus of Gastropoda Fissurellidae (Mollusca-base, 2021).

More than 40 years later, Goto & Ozaki (1929: 370) used the same name for a genus of flatworm, currently still accepted (Bakhomov *et al.*, 2015; Tyler *et al.*, 2006–2021). Thus, the genus *Atractotrema* Goto et Ozaki, 1929 is a junior homonym of the genus name *Atractotrema* Cossmann and, according to the ICZN (1999, Article 60), since no synonyms are available (see ICZN, 1999, Arts. 60.1, 60.2), it should be replaced with a new name. Herein we propose the name *Emprostiotrema* Cianferoni et Ceccolini **nom.n.**

ETYMOLOGY. The new name, from ἐμπρόσθιος (anterior), refers to the position of the male gonopore. Neutral gender.

SYSTEMATICS

Genus *Emprostiotrema* Cianferoni et Ceccolini **nom.n.**

Species *Emprostiotrema fusum* (Goto et Ozaki, 1929) **comb.n.** = *Atractotrema fusum* Goto et Ozaki, 1929 (type species)

Emprostiotrema kuntzi (Ahmad, 1985) **comb.n.** = *Atractotrema kuntzi* Ahmad, 1985

Emprostiotrema sigani (Durio et Manter, 1969) **comb.n.** = *Atractotrema sigani* Durio et Manter, 1969

REMARKS. *Atractotrema* Goto et Ozaki, 1929 is the type genus of the family Atractotrematidae, thus the name of this family-group taxon is invalid because its type genus is a junior homonym (ICZN, 1999, Arts. 23.4.1, 39). Since no synonyms are available, a replacement for

the family-group name is required in relation to the new generic name. We propose Emprostiotrematidae Cianferoni et Ceccolini **nom.n.** to replace Atractotrematidae Yamaguti, 1939.

II.

Subphylum RHABDITOPHORA
Ehlers, 1985
Class CESTODA Rudolphi, 1808
Order CYCLOPHYLLIDEA van Beneden
in Braun, 1900
Family DILEPIDIDAE Fuhrmann, 1907

Cossmann (1902: 52) proposed the name *Clelandia* as nomen novum for the preoccupied trilobite name *Harrisia* Cleland, 1900 nec *Harrisia* Robineau-Desvoidy, 1830 (Diptera); currently the name is an accepted genus of Ptychopariida Kingstoniidae (Jell, Adrain, 2013; IRMNG, 2021).

Few years later, Johnston (1909: 145) erected the new genus *Clelandia* for the new Cestoda species *C. parva*; so far this genus name is accepted (see Bona, 1978; Presswell *et al.*, 2012; Mariaux *et al.*, 2017; IRMNG, 2021). However, this name is invalid under the principle of homonymy, being a junior homonym of *Clelandia* Cossmann. It lacks an available synonym (see ICZN, 1999, Arts. 60.1, 60.2); thus, we propose to replace it with the name *Aristeraclelandia* Ceccolini et Cianferoni **nom.n.**

ETYMOLOGY. The new name, ἀριστερά (left), refers to the position of the gonopores. Feminine gender.

SYSTEMATICS

Genus *Aristeraclelandia* Ceccolini et Cianferoni **nom.n.**

Species *Aristeraclelandia parva* (Johnston, 1909) **comb.n.** = *Clelandia parva* Johnston, 1909 (type species)

III.

Subphylum RHABDITOPHORA
Ehlers, 1985
Class CESTODA Rudolphi, 1808
Order CYCLOPHYLLIDEA van Beneden
in Braun, 1900
Family ANOPELOCEPHALIDAE
Cholodkowsky, 1902

Lühe (1898: 650) established the genus *Oochoristica* for reptile cestodes, including two

species precedently described by Rudolphi (1819) under the genus *Taenia*. One of them was later transferred by Spasskij (1951: 593) to the new genus *Semenoviella*. Even if Della Santa (1956) considered *Semenoviella* synonym of *Oochoristica*, to date the two genera are maintained separated. Indeed, whilst *Oochoristica* includes about 85 species, even if most of them needs a revision (Schuster, 2011), according to criteria presented by Mašová *et al.* (2012), *Semenoviella* accomodates the species *S. amphibaenae* (Rudolphi, 1819) (Ávila, Silva, 2010; Justo *et al.*, 2017; IRMNG, 2021).

However, *Semenoviella* Spasskij is invalid as the name is preoccupied by *Semenoviella* Obenberger, 1924. Indeed, Obenberger (1924: 7) used it for a genus of Coleoptera Buprestidae which is still in use (see Bellamy, 2008; IRMNG, 2021). Thus, as no synonym of *Semenoviella* Spasskij is available, in accordance with the ICZN (1999, Arts. 60.1, 60.2) we propose the new substitute name *Pseudosemenoviella* Ceccolini et Cianferoni **nom.n.**

ETYMOLOGY. The new name is formed by adding the prefix ψευδής (false) to the original name by Spasskij (1951). Feminine gender.

SYSTEMATICS

Genus *Pseudosemenoviella* Ceccolini et Cianferoni **nom.n.**

Species *Pseudosemenoviella amphibaenae* (Rudolphi, 1819) **comb.n.** = *Semenoviella amphibaenae* (Rudolphi, 1819) = *Oochoristica amphibaenae* (Rudolphi, 1819) = *Taenia amphibaenae* Rudolphi, 1819 (type species)

IV.

Subphylum RHABDITOPHORA
Ehlers, 1985
Class CESTODA Rudolphi, 1808
Order CYCLOPHYLLIDEA van Beneden
in Braun, 1900
Family DAVAINIIDAE Braun, 1900

Hyatt & Pilsbry (1911: 93) established the genus *Fernandezia* within the family Achatinellidae. Currently this genus name is still accepted

within this family of Gastropoda Stylommato-phora (MolluscaBase, 2021).

López-Neyra (1936: 16) created a homonym by introducing a new genus to accommodate a new species of cestodes (*F. goizuetai*) while at the same time transferring to it *Davain-ea spinosissima* von Linstow, 1893. Nowadays, *Fernandezia* López-Neyra is accepted (Marius et al., 2017), including three species of parasites of passerine birds according to Schmidt (1986), but only *F. goizuetai* according to IRM-NG (2021). Anyway, *Fernandezia* López-Neyra is invalid and, lacking available synonyms, according to the ICZN (1999, Arts. 60.1, 60.2), needs a new replacement name which is proposed herein: *Turdifernandezia* Ceccolini et Cianferoni **nom.n.**

ETYMOLOGY. The new name refers to the host, belonging the bird genus *Turdus*, from which the type specimens were collected (López-Neyra 1936: 16), adding the stem of the genus as prefix and a “i” as connection. Feminine gender.

SYSTEMATICS

Genus *Turdifernandezia* Ceccolini et Cianferoni **nom.n.**

Species *Turdifernandezia goizuetai* (López-Neyra, 1936) **comb.n.** = *Fernandezia goizuetai* López-Neyra, 1936 (type species)

Resurrected name

Subphylum RHABDITOPHORA

Ehlers, 1985

Class TREMATODA Rudolphi, 1808

Order PLAGIORCHIIDA La Rue, 1957

Family DIDYMOZOIDAE Monticelli, 1888

Mamaev (1968: 166) established the genus *Didymosphaera* within the fluke family Didymozoidae to accommodate the new species *D. mirabilis*. Pozdnyakov (1993, 1996) synonymized *Opepherotrematoides* and *Triplocystoides* Yamaguti, 1970 with *Didymosphaera*. Currently, the genus *Didymosphaera* includes three species: *D. mirabilis* Mamaev, 1968, *D. multitubularis* (Yamaguti, 1970), and *D. yaito* (Yamaguti, 1970) (Tyler et al., 2006–2021).

However, previously Linck (1883: 59) had named *Didymosphaera* a genus of fossil Demospongia, currently still accepted (Sepkoski, 2002; IRMNG, 2021). Consequently, *Didymosphaera* Mamaev is a junior homonym and needs to be replaced (ICZN, 1999, Art. 60.1). In this case the genus has two junior subjective synonyms and according to Art. 60.2 of ICZN (1999) the oldest of these becomes the valid name of the taxon. Both *Opepherotrematoides* and *Triplocystoides* were established by Yamaguti (1970); *Opepherotrematoides* was introduced on page 214 and *Triplocystoides* on page 215. Here, acting as First Revisers (see ICZN, 1999, Art. 24.2.1), we choose the first name that appears in the publication that is *Opepherotrematoides* Yamaguti, 1970 to replace *Didymosphaera* Mamaev, 1968.

SYSTEMATICS

Genus *Opepherotrematoides* Yamaguti, 1970

Species *Opepherotrematoides mirabilis* (Mamaev, 1968) = *Didymosphaera mirabilis* Mamaev, 1968

Opepherotrematoides multitubularis Yamaguti, 1970 (type species) = *Didymosphaera multitubularis* (Mamaev, 1968)

Opepherotrematoides yaito (Yamaguti, 1970) **comb.n.** = *Didymosphaera yaito* (Yamaguti, 1970) = *Triplocystoides yaito* Yamaguti, 1970

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