

## Short note

# *Astroblastocystis* nom. nov. – a new replacement name for *Blastocystis* Jaekel, 1918 (Echinodermata, Parablastoidea)

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**ABSTRACT.** The generic name *Blastocystis* has been proposed at least twice for different organisms for which nomenclature is governed by the International Code of Zoological Nomenclature. *Blastocystis* Jaekel, 1918, is a junior homonym of the generic name *Blastocystis* Alexeieff, 1911. We propose the following *Astroblastocystis* nom. nov. as a new replacement name (neonym) for *Blastocystis* Jaekel, 1918.

**Keywords** *Astroblastocystis* nom. nov., Astroblastocystidae nom. nov., *Blastocystis*, Blastocystidae, Echinodermata

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The generic name *Blastocystis* has been proposed at least twice for different organisms for which nomenclature is governed by the International Code of Zoological Nomenclature (“the Code” below [1].

Initially Alexeieff [2] erected the genus *Blastocystis* for heterotrophic protists (Stramenopiles, Bigyra, Opalozoa). Later Jaekel [3] proposed the name *Blastocystis* for a new parablastoid genus (Echinodermata, Parablastoidea). Both genera are type genera for their respective families. Genus *Blastocystis* Jaekel, 1918, is a type genus of the family Blastocystidae Jaekel, 1918 [3], also genus *Blastocystis* Alexeieff, 1911, is a type genus of the family Blastocystidae Jiang & He, 1993 [4].

Both the protozoan genus and parablastoid genus are considered valid and distinct genera [5, 6], but *Blastocystis* Jaekel, 1918, is a junior homonym of the generic name *Blastocystis* Alexeieff, 1911. The family Blastocystidae Jaekel, 1918, is a valid family [7, 8], however, its name is invalid.

The name *Blastocystis* Jaekel, 1921, does not have a junior objective or subjective synonym [6, 9, 10]. Therefore a new name is required for this genus according to Articles 53 and 60 of the Code [1].

We propose the following *Astroblastocystis* nom. nov. as a new replacement name (neonym) for *Blastocystis* Jaekel, 1918:

***Astroblastocystis* nom. nov. pro *Blastocystis* Jaekel, 1918 (nec *Blastocystis* Alexeieff, 1911).**

Etymology: From the Greek ἄστρον (Latin *astrum*) – star and from “blastocystis”.

Type species: *Astroblastocystis rossicus* (Jaekel, 1918) comb. n. (protonym: *Blastocystis rossicus* Jaekel, 1918).

Changing the name of a genus according to Article 39 of the Code requires a subsequent change of the family name – the new name of the family should be:

**Astroblastocystidae nom. nov. pro Blastocystidae Jaekel, 1918 (nec Blastocystidae Jiang & He, 1993).**

Included genera [6, 7, 8]: *Astroblastocystis* nom. nov. – type genus; *Blastoidocrinus* Billings, 1859; *Cambroblastus* Smith & Jell, 1990; *Eurekablastus* Sprinkle & Sumrall, 2008; *Kosachenkoastrus* Rozhnov, 2013; *Meristoschisma* Sprinkle, 1973; *Parabolablastus* Sprinkle & Sumrall, 2008 [7, 8, 11–14].

### Availability of data and materials

The data that support the findings of this study are available from the corresponding author, [RS], upon request.

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### Authors' contributions

Authors contributed equally to this work. All authors read and approved the final manuscript.

### Competing interests

All authors have no competing interests.

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