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**Updated keys to the genera in the subfamilies of Cyclocoelidae Stossich, 1902,
including a reconsideration of species assignments, species keys
and the proposal of a new genus in Szidatitreminae Dronen, 2007**

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Abstract

Keys to the six subfamilies, 22 genera within subfamilies and 128 species recognized within the Cyclocoelidae are provided. Lists of species in each genus are provided, along with taxonomic summaries that include type host, type locality, additional hosts, additional localities, previously proposed synonyms, and remarks for each species. The following synonymies are proposed: *Cyclocoelum mutabile* (Zeder, 1800)—Syn. *C. microstomum* (Creplin, 1929); *Cyclocoelum leidy* Harrah, 1922—Syn. *C. cuneatum* Harrah, 1922; *Cyclocoelum mehrotrai* Sinha & Sahay, 1975—Syn. *C. mathuri* Jain, 1984; *Selfcoelum allahabadi* (Khan, 1935) n. comb.—Syns. *Cyclocoelum agamprasadi* Jain, 1983, *Cyclocoelum erythropis* Khan, 1935 and *Cyclocoelum indicum* Khan, 1935; *Selfcoelum obliquum* (Harrah, 1921) n. comb.—Syn. *Cyclocoelum mehrii* Khan, 1935; *Uvitellina adelphus* (Johnston, 1917)—Syn. *Cyclocoelum (Uvitellina) dollfusi* Tseng, 1930; *Uvitellina kaniharensis* (Gupta, 1958)—Syn. *U. indica* Siddiqi & Jairajpuri, 1962; *Uvitellina simile* (Stossich, 1902) n. comb.—Syn. *U. magniembria* Witenberg, 1923; *Uvitellina vanelli* (Rudolphi, 1819)—Syns. *U. keri* Yamaguti, 1933 and *U. tageri* Yamaguti, 1933; *Wardianum triangulare* (Harrah, 1922)—Syn. *Wardianum catoptrophori* Dronen, 2007; *Haematotrephus limnodromi* Dronen, Gardner & Jiménez, 2006—Syn. *H. selfi* Dronen, Gardner & Jiménez, 2008; and *Hyptiasmus arcuatus* (Brandes, 1892 of Stossich, 1902)—Syn. *H. coelonodus* Witenberg, 1923. Based on the lack of adequate descriptive information, *Cyclocoelum cornu* (Zeder, 1800); *Cyclocoelum crenulatum* (Rudolphi, 1809); *Haematotrephus nigropunctatum* (von Linstow, 1883) n. comb.; *Haematotrephus robustus* Ukoli, 1968; *Hyptiasmus californicus* (Wootton, 1966); and *Hyptiasmus vigisi* Savinov, 1960 are considered to be *species inquirendae*. *Hyptiasmus witenbergi* Tret'jakova, 1940 (described in a dissertation) is considered to be a *nomen nudum*. Comparative tables containing measurements, morphometric percentages and morphometric ratios for species in the family are provided and the comparative characteristics used to distinguish species in the Cyclocoelidae are discussed.

Key words: Cyclocoelidae, Cyclocoelinae, Haematotrephinae, Hyptiasminae, keys, Ophthalmophaginae, Skrjabinocoelinae, Szidatitreminae, *Pseudoszidatitrema* n. gen.

Introduction

Cyclocoelidae Stossich, 1902 has been an unsettled taxonomic group with various authors proposing numerous changes in their taxonomy based on quite different points of view. As more taxonomic frameworks have been proposed (e.g. Kossack 1911; Witenberg 1923, 1926; Baskirova 1950; Dubois 1959; Kanev *et al.* 2002a, Dronen 2007a) and additional genera and species have been described, the family has become even more complicated and disorganized to the point where providing a comprehensive historical account has become nearly impossible. The identification of species and their assignment to genera, and to some degree, the definition of genera and their assignments to subfamilies has become difficult because there is no consensus on these assignments where recent changes and new taxa have been established. Yamaguti (1971) recognized three subfamilies: Cyclocoelinae Stossich, 1902 where an external seminal vesicle was absent, the buccal cavity was funnel-shaped, the ceca were simple (not diverticulate), and where cercariae encysted within the rediae in which they developed; Promptenovinae Yamaguti, 1971 where an external seminal vesicle was present and the buccal cavity was tubular; and Typhlocoelinae Harrah, 1922 where the external seminal vesicle was absent, the buccal cavity was funnel-shaped, the ceca were diverticulate, and where cercariae encysted in the tissue of the snail outside the rediae in which they developed. Yamaguti (1971) recognized 22 genera in the family. In Cyclocoelinae, he recognized 19 genera: *Allopyge* Johnston, 1913; *Bothrigaster* Dollfus, 1948; *Contraoelum* Witenberg, 1926; *Corpopyrum* Witenberg, 1923; *Cyclocoelum* Brandes, 1892; *Cycloprimum* Witenberg, 1923; *Haematoprimum* Witenberg, 1923; *Haematotrephus* Stossich, 1902; *Harrhium* Witenberg, 1926; *Hyptiasmus* Kossack, 1911; *Morishitium* Witenberg, 1928; *Ophthalmophagus* Stossich, 1902; *Prohyptiasmus* Witenberg, 1923; *Skrjabinocoelum* Kurashvili, 1953; *Spaniometra* Kossack, 1911; *Szidatitrema* Yamaguti, 1971; *Transcoelum* Witenberg, 1923; *Uvitellina* Witenberg,