

Article



Circumvitellatrema momota n. gen., n. sp. (Digenea: Cyclocoelidae: Cyclocoelinae) from a captive-hatched blue-crowned motmot, Momotus momota (Momotidae)

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Abstract

Circumvitellatrema momota n. gen., n. sp. was found in the air sacs of a captive-hatched blue-crowned motmot, Momotus momota (Momotidae), that was being maintained in quarantine at the Animal Health Center of the Philadelphia Zoo in Philadelphia, Pennsylvania, U.S.A. This bird apparently became infected at the Audubon Zoo, New Orleans, Louisiana, U.S.A. where it was maintained for several years prior to being sent to the Philadelphia Zoo. In the new genus, the ovary is intertesticular, forming a triangle with the testes and the genus is assigned to Cyclocoelinae. It can be distinguished from the other 3 genera currently assigned to this subfamily (Cyclocoelum, Psophiatrema, and Selfcoelum) by having the vitelline fields confluent at both the anterior and posterior ends of the body forming a continuous loop. This new species was likely introduced into the Audubon Zoo through the importation of species of exotic birds.

Key words: Audubon Zoo, blue-crowned motmot, *Circumvitellatrema momota* **n. gen.**, **n. sp.**, Coraciiformes, Cyclocoelidae, Cyclocoelinae, Digenea, Louisiana, Momotidae, *Momotus momota*, New Orleans, Pennsylvania, Philadelphia Zoo, Trematoda, U.S.A.

Introduction

The blue-crowned motmot, *Momotus momota* (Linnaeus) (Coraciiformes: Momotidae), is a relatively large bird that is commonly collected for zoos as an exhibit species. It is generally found from Mexico southward through most of Central and South America. It is a relatively common species whose extensive distribution includes most tropical and subtropical forest types including tropical evergreen, montane evergreen, gallery, tropical deciduous, river-edge, and secondary-growth forests (Walters 1980, Snow 2002, The American Ornithologists' Union 1998).

As far as we can determine, only 2 species of Digenea have been reported previously from the blue-crowned motmot: *Hyptiasmus costaricensis* Brenes-Madrigal & Arroyo, 1962 (Cyclocoelidae) (originally reported as *Cyclocoelum [Hyptiasmus] costaricensis* Brenes-Madrigal & Arroyo, 1962) described by Brenes & Arroyo (1962); and *Ornithotrema momoti* Cabellero, Brenes, & Arroyo, 1963, described by Caballero y Caballero *et al.* (1963), both from Costa Rica.

Six subfamilies are currently recognized in Cyclocoelidae Stossich, 1902 based largely on the position of the ovary relative to the testes: Cyclocoelinae Stossich, 1902 in which the ovary is intertesticular forming a triangle with the testes; Haematotrephinae Dollfus, 1948 in which the position of the ovary ranges from being