

A new genus and species of amphistome parasite (Trematoda: Cladorchiidae) from a fish of Rondônia State, Brazil

by

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(Accepted for publication: July, 2000).

Abstract

A new genus and species of amphistome parasite (Trematoda: Cladorchiidae) is described from a characid fish, *Curimata vittata* GUNTHER, taken in the Brazilian state of Rondônia. The new amphistome is of a very small size (609-774 μm) and has a relatively large pharynx and a large acetabulum. It differs from the other small amphistomes known by possessing diagonal testes and a prominent genital sucker. Additionally, the eggs are large (100 x 60 μm) and few in number (1-4).

Keywords: Trematodes, amphistomes, fish parasites, Brazil, Rondonia.

Resumo

Um novo gênero e espécie de anfistomídeo (Trematoda: Cladorchiidae), parasita de *Curimata vittata* GUNTHER, do Estado do Rondônia é descrito. O novo anfistomídeo é muito pequeno (609-774 μm), tem uma faringe e um acetábulo relativamente grandes. Distingue-se dos outros anfistomídeos de pequenos tamanhos por ter testículos diagonais e uma ventosa genital proeminente. Adicionalmente, os ovos são grandes (100 x 60 μm) e presentes em números pequenos (1-4).

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The amphistomes comprise a large group of trematodes characterized by having the acetabulum at or near the posterior extremity. According to SEY (1991) worldwide there are 52 species known from fishes, 36 from amphibians, 34 from reptiles, 133 from mammals and a single species from birds. TRAVASSOS et al. (1969) listed 8 genera of amphistomes from South American fishes and THATCHER (1979, 1992a, 1992b), THATCHER & JÉGU (1996) and THATCHER, SEY & JÉGU (1996) added 13 more genera to the list. The present paper describes another new genus of amphistome making a total of 22 genera from South American fishes.

Materials and Methods

Fish hosts were netted, identified and eviscerated. The viscera were fixed in 10% formalin solution and later transferred to 70% ethanol. The fixed intestinal tracts were opened, washed in tap water and the residue was concentrated by hand sedimentation. Permanent slides were made by the phenol-balsam method described in THATCHER (1993). The drawing was made with the aid of a camera lucida and the measurements were taken with a measuring ocular. Sizes are indicated in micrometers (μm) with the means followed by the extremes in parentheses.

Results

Cladorchiidae SOUTHWELL & KIRSHNER, 1937

Caballeroinae YAMAGUTI, 1971

Curimatrema n.gen.

Generic diagnosis: With the characters of the family and subfamily. Body small, pyriform with anterior expansion and large subterminal acetabulum. Pharynx large with prominent external diverticula. Esophagus short, ceca reaching acetabulum. Testes spherical, diagonal, equatorial or pre-equatorial; cirrus sac absent; large genital sucker present near intestinal bifurcation. Ovary spherical, post-testicular, lateral to midline; vitelline glands comprising few follicles on either side near cecal ends; eggs large, few in number. Intestinal parasites of freshwater fishes.

Type species: *Curimatrema microscopica* n.sp.

Curimatrema microscopica n.sp. (Fig. 1)

Host: *Curimata vittata* GUNTHER (Curimatidae).

Site: Intestinal lumen.

Locality: Porto Novo, Rondônia, Brazil.

Holotype (INPA 373) and 7 paratypes (INPA 374 a-g): Invertebrate Collection of the Instituto Nacional de Pesquisas da Amazônia, Manaus, AM, Brazil.

Etiymology: The generic name is taken from that of the host fish and the specific designation recalls the small size of this species.

Species description (based on 9 specimens): Body 676 (609-774) long and 372 (348-392) wide. Pharynx 170 (154-183) long and 144 (114-174) wide; esophagus 77-110 long; ceca long, slightly sinuous. Anterior testis 89 (66-121) long by 89 (66-106) wide; posterior testis 90 (77-110) long by 77 (66-99) wide;

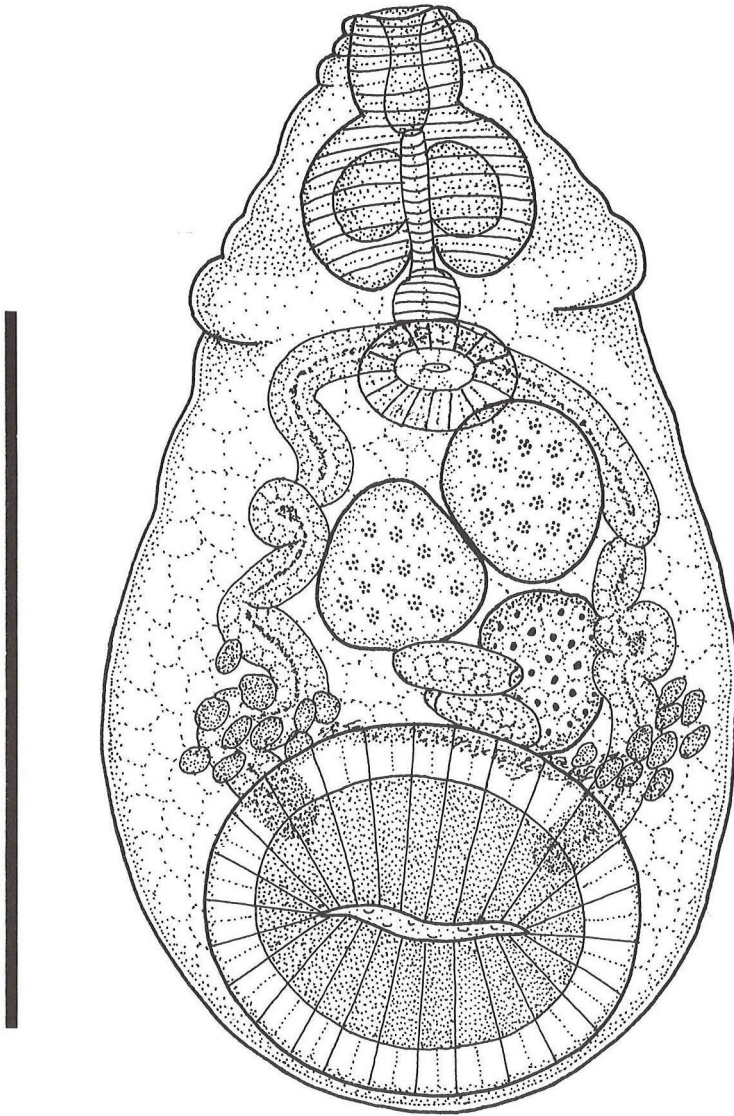
genital sucker 77 (55-88) long and 87 (55-110) wide. Ovary 53 (44-66) long and 54 (44-66) wide; vitelline follicles 13-22 in diameter; eggs few (1-4 in number) measure 100 x 60 (88-120 x 44-77).

Discussion

Curimatrema microscopica n.gen. et n.sp. somewhat resembles *Gammamphistoma collaris* THATCHER & JÉGU, 1996, from the pacu, *Mylesinus paraschomburgkii* JÉGU, SANTOS & FERREIRA, in that both are small and have prominent anterior expansions. In the new genus, however, the pharyngeal sacs are external (not internal), the testes are diagonal (not tandem), there is a genital sucker (not a cirrus sac), the ovary is lateral to the midline (not on it) and there are fewer eggs.

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Fig. 1:
Curimatrema microscopica n.gen. et n.sp. (ventral view). Scale bar = 500 μ m.