

*BRAVOTREMA HOLLISAE* GEN. NOV. AND SP. NOV.  
(TREMATODA, DICROCOELIIDAE) FROM *CENTURUS*  
*SUPERCILIARIS* (PICIFORMES)

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ABSTRACT

A trematode *Bravotrema hollisa* gen. nov. et sp. nov. found in the woodpecker *Centurus superciliaris superciliaris* Temminck (Piciformes) in Cuba, is described in this paper. This finding led to a rearrangement of the key to the genera of Eurytrematini.

RESUMEN

En este trabajo se describe un tremátodo, *Bravotrema hollisae* gen. nov. y sp. nov. encontrado en el picamadero *Centurus superciliaris superciliaris* Temmick (Piciformes) en Cuba. Este hallazgo condujo a un rearrreglo de la clave para los géneros de Eurytrematini.

During our stay in Cuba we made helminthological examinations of 21 specimens of the West Indian Red-bellied Woodpecker (*Centurus s. superciliaris* Temminck) captured in the province of Oriente. One of the hosts harboured 13 trematodes. As the host was badly damaged, the exact location of the parasite could not be determined.

The following description and illustration of the parasites, which are considered representatives of a new genus and species, is based on the 10 best preserved specimens from a type series deposited in the Institute of Parasitology, Czechoslovak Academy of Sciences (Nº 1273/1 — halotype, Nº 1273/2-10 — paratypes). Two paratypes are deposited in the Humboldt Museum in Berlin.

*Bravotrema hollisae* gen. nov. et sp. nov.

Host: *Centurus superciliaris superciliaris*

Location: Liver?

Locality: Cuba, province of Oriente, Baracoa

Thirteen specimens of the described species were found in one of the 21 examined hosts (*C. superciliaris*).

*Description* (based on the type series 1-10): Body elliptical, posterior portion markedly attenuated. Cuticle without apparent cuticular formations. Length of body 2.41-3.54 mm, maximum width in the region of vitellaria 0.83-1.60 mm. Subterminal oral sucker measures 0.138-0.198 x 0.138-0.219 mm. Prepharynx absent, pharynx measures 0.043-0.087 x 0.051-0.087 mm. Oesophagus clearly visible, measuring 0.109-0.219 mm in length. Ventral sucker reduced, located in the anterior half of the body. It is larger than the oral sucker and measures 0.233-0.306 x 0.255-0.343 mm. Its outline can be distinguished in some specimens only, while other specimens of this type series

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possess only a dark oval spot at the place of the ventral sucker. The distance from the upper margin of ventral sucker to the anterior end of the body is 0.744-1.248 mm. Intestinal caeca terminate blindly at the beginning of the last fourth of body behind the vitellaria. Testes relatively large, spherical to oval, with smooth outline, symmetrical, but above the median line they pass through the middle of the ventral sucker. They overlap the intestinal caeca laterally. Measurements of testes 0.272-0.474 x 0.138-0.365 mm. Ovary smooth, measuring 0.146-0.219 x 0.146-0.204 mm. Together with Mehli's gland it lies subequatorially close to the left vitellarium. Cirrus pouch below the intestinal bifurcation, measuring 0.182-0.270 mm in length and 0.124-0.204 mm in width. Laurer's canal present. Vitellaria intercaecal, formed of relatively large elongated follicles orientated to the center of clusters, forming thus star-shaped formations. Follicles number 8-19 in each cluster. Uterus occupies the whole free intercaecal portion of body. The descending branch of uterus extends from the oviduct to the posterior portion of the body. The ascendant branch passes between vitellaria and between both testes to the genital opening, situated medially in the region of the intestinal bifurcation. Eggs dark brown, widely oval, with a flat lid, measuring 0.050-0.058 x 0.036-0.43 mm.

This taxon has been described in honour of Dr. Margarita Bravo Hollis on the occasion of her retirement.

*Generic diagnosis:* Dicrocoeliidae: Body of medium size. Oral sucker subterminal. Oesophagus short, caeca long. Acetabulum rudimentary, preequatorial. Testes of smooth outline, symmetrical, preacetabular. Genital opening in the bifurcal zone. Ovary smooth, spherical, postacetabular, lateral. Vitellaria composed of large follicles clustered in star-shaped formations, lateral, intercaecal

and postovarial. Uterus occupies the whole free intercaecal portion of body. Genital opening bifurcal.

*Discussion:* Some morphological and anatomical features of the above-described trematodes are identical with those of *Pancreatrema* Oschmarin, 1952, *Skrjabinus* Strom, 1940 *sensu stricto* and *Concinnum* Bhalerao, 1936.

*Bravotrema* gen. nov. is most similar to *Pancreatrema*, differing from it in the preacetabular position of the testes and in the shape, arrangement and location of vitellaria. In its general appearance it resembles the species *Skrjabinus skrjabini* (Issaitschikoff, 1920). However, it differs from it in the bifurcal position of the genital opening, preacetabular position of testes and in the shape and position of vitellaria. Some species of the genus *Concinnum* have the same character if vitellaria as *Bravotrema hollisiae* sp. nov. but these are mostly extra-caecal, whereas vitellaria of *Bravotrema hollisiae* are intercaecal.

Yamaguti (1958) placed *Pancreatrema*, together with the genus *Stromitrema* Skrjabin and Evranova, 1944, in a new subfamily Stromitrematinae Yamaguti, 1958. Considering the incomplete diagnosis of the genus *Stromitrema* (the data on oesophagus, intestinal branches, acetabulum, cirrus pouch and position of genital opening are lacking), we find it uncertain to place both these genera in a single subfamily, at least at the present time. The position of the genus *Stromitrema* in the group of taxons of the family Dicrocoeliidae is not clear. According to Yamaguti (1958) the subfamily Stromitrematinae differs from the subfamily Dicrocoeliinae in the absence of acetabulum, which has not been determined in any sense in the single known species *S. koshewnikovi* (Skrjabin and Massino, 1925). In *Pancreatrema disacetabulum* Oschmarin, 1952 a rudiment of acetabulum was found in the transverse

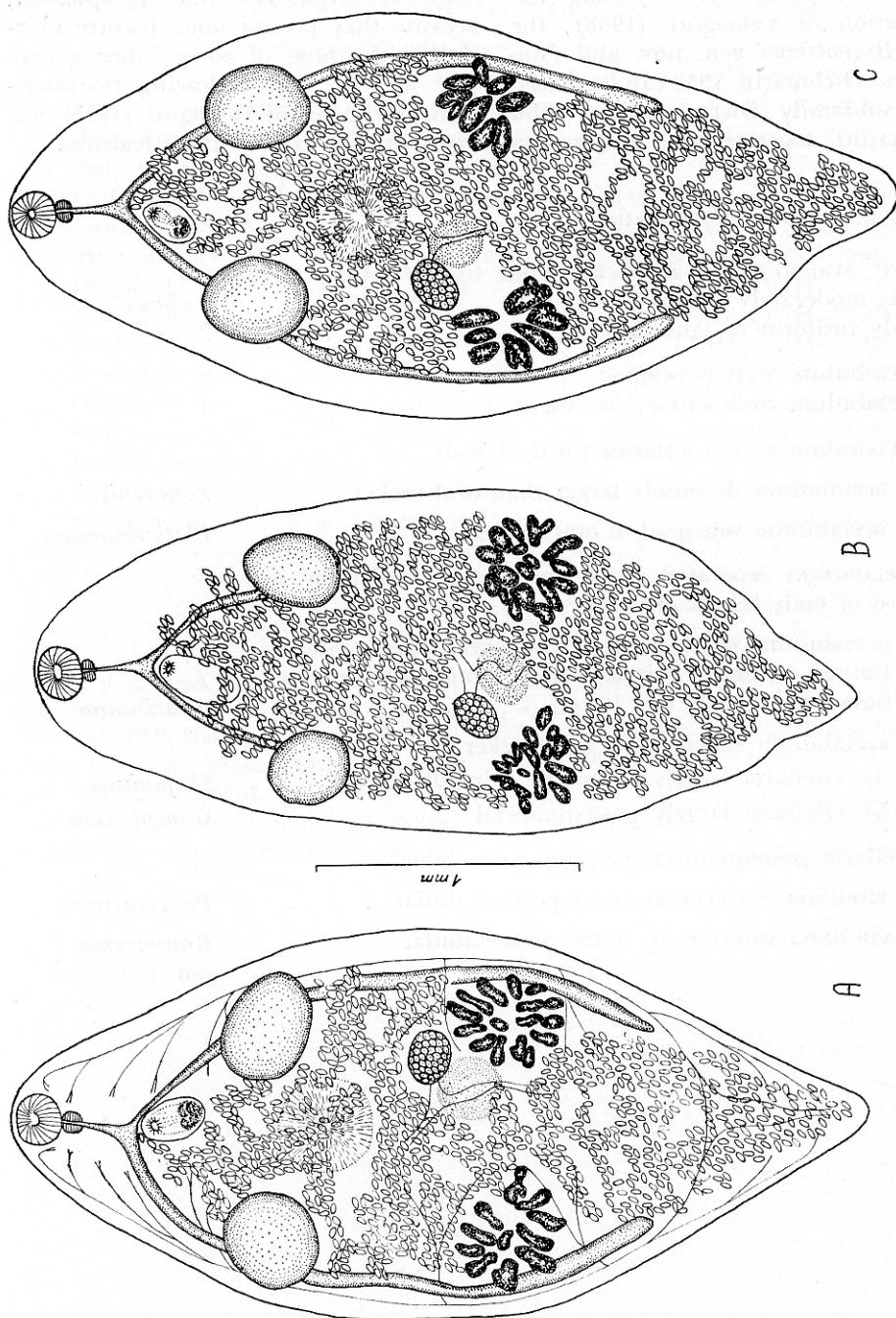


Fig. 1. *Bravotrema hollisae* gen. nov. and sp. nov. A - holotype; B, C - paratypes (in B acetabulum was not visible).





TABLE 1

MEASUREMENTS OF *BRAVOTREMA HOLLISAE* GEN. NOV. AND SP. NOV. (IN MM)

|                  | <i>Holotype</i>      | <i>All specimens</i>                 |
|------------------|----------------------|--------------------------------------|
| Body length      | 3.12                 | 2.41 — 3.54                          |
| Body width       | 1.51                 | 0.83 — 1.60                          |
| Oral sucker      | $0.177 \times 0.185$ | $0.138 - 0.198 \times 0.138 - 0.219$ |
| Ventral sucker   | about 0.300          | $0.233 - 0.306 \times 0.255 - 0.343$ |
| Pharynx          | $0.066 \times 0.074$ | $0.043 - 0.087 \times 0.051 - 0.087$ |
| Oesophagus       | 0.171                | 0.109 — 0.219                        |
| Cirrus pouch     | $0.222 \times 0.155$ | $0.182 - 0.270 \times 0.124 - 0.204$ |
| Testis I.        | $0.444 \times 0.318$ | $0.284 - 0.444 \times 0.138 - 0.365$ |
| Testis II.       | $0.407 \times 0.325$ | $0.272 - 0.474 \times 0.146 - 0.343$ |
| Ovary            | $0.192 \times 0.170$ | $0.146 - 0.219 \times 0.146 - 0.204$ |
| Ova              | $0.052 \times 0.038$ | $0.050 - 0.058 \times 0.036 - 0.043$ |
| Distance between |                      |                                      |
| Suckers          | about 1.0            | 0.744 — 1.248                        |
| Vitellaria       | 11/10                | 8 — 19/10 — 17                       |

## LITERATURE

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