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NEOTROPICAL MONOGENOIDEA, 1. *OLIGAPTA KRUIDENIERI* N. SP. (AXINIDAE: INDOCOTYLINAE) FROM *THYRINOPS PACHYLEPIS* (GÜNTHER) IN EL SALVADOR

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Abstract.—*Oligapta kruidenieri* n. sp. (Axinidae: Indocotylinae) is described from the gills of *Thyrinops pachylepis* (Günther) from an estuary located 13°15′N; 88°40′W (north shore of Peninsula de San Juan del Gozo, El Salvador). This species is distinguished from other species of the genus by having only 3–4 testes, an unarmed cirrus, vitellaria extending to pharynx, and by being less than 1 mm in length. The generic diagnosis of *Oligapta* Unnithan, 1957, is emended.

Thus far, only 2 species of *Oligapta* have been described, both from the gills of marine fishes of the Eastern Hemisphere. Unnithan (1957) proposed the genus for *O. oligapta* collected from *Hemiramphus georgeii* (Val.) from Mandapom Camp, India. Young (1968) described *O. manteri* from gar pike, *Hemiramphus* sp., from Noumea, New Caledonia. As part of a survey of the monogenoid fauna of El Salvador (Central America) during 1976, 5 specimens of an undescribed species of *Oligapta* were recovered from the gills of 2 *Thyrinops pachylepis* (Günther) collected from an estuary located 13°15′N; 88°40′W (north shore of Peninsula de San Juan del Gozo). This species is described herein as *O. kruidenieri* (respectfully named for Dr. F. J. Kruidenier, University of Illinois, Urbana).

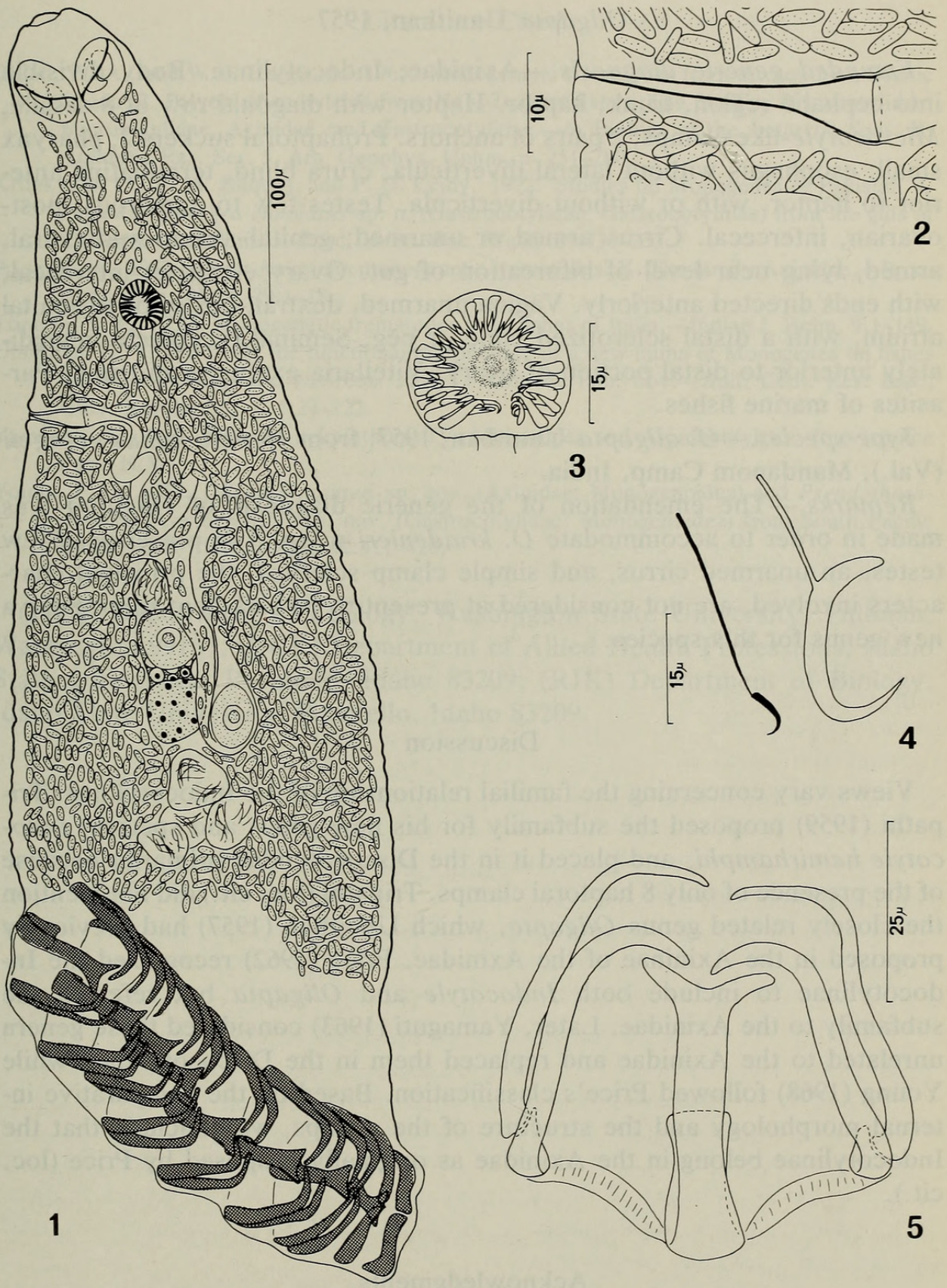
Hosts were collected by dip net and immediately placed into a 1:4,000 mixture of formalin and seawater. After 1 hour, sufficient formalin was added to the containers to make a 5% solution. Monogenoids were removed directly from the gills and stored in 10% formalin. Techniques for the preparation and study of the helminths were those of Kritsky et al. (1972). Measurements, in μm, were made according to the procedures of Dillon and Hargis (1965). Figures were prepared with the aid of a camera lucida or microprojector. Type specimens were deposited in the U.S. National Museum of Natural History Helminthological Collection (USNM 75211, holotype; 75212, paratypes); and the University of Nebraska State Museum (No. 20975, paratype). Fish hosts were deposited in the American Museum of Natural History (No. 38203).

Oligapta kruidenieri, new species
Figs. 1–5

Description (based on 1 immature and 4 adult specimens; adults measured).—Length 515 (484–586), greatest width 187 (142–224) near level of reproductive organs. Body lanceolate, stout. Tegument thick with numerous minute folds. Anterior cephalic margin with 3 (1 terminal) incipient lobes; well-developed glandular area anterior to prohaptoral suckers. Prohaptoral suckers 2, lying in posterolateral wall of buccal funnel; sucker subovate, 29 (26–33) by 21 (18–24), with conspicuous septum. Haptor 187 (158–209) long, 204 (155–245) wide, diagonal, armed with 8 sessile clamps and 2 pairs of anchors; clamp formation suppressed in adult. Clamps similar; sclerites delicate, fragile; center piece with simple dorsal and T-shaped ventral terminations; dorsal loop sclerite incipient; clamp 67 (53–84) wide, 55 (47–62) long. Anchors dissimilar, situated dorsal to the 4th, 5th, and 6th clamps. Median anchor with lunate blade, elongate shaft originating from base of blade; anchor 37–38 long. Lateral anchor sickle shaped with elongate deep root; anchor 36–37 long. Pharynx ovate, 16 (12–21) wide, lying immediately posterior to buccal funnel; esophagus elongate, simple; crura obscured. Testes 3–4, irregular; each 19 (17–21) in diameter. Seminal vesicle, prostates absent; vas deferens obscured. Genital atrium 22 (19–24) in diameter, midventral at level of bifurcation of gut, armed with 26–31 spines disposed into 2 tiers; spines 6–7 long, with recurved point, simple base. Ovary J-shaped, lying dextral to midsagittal plane. Seminal receptacle immediately anterior to ovary; oviduct, uterus delicate; oötype sinistral to posterior portion of ovary; vitelline reservoir Y-shaped, with long sinistral branch. Vitellaria dense throughout trunk except absent in region of gonads. Vagina dextral, with distal sclerotized cone; cone 27 (23–30) long. Genitointestinal canal, excretory system, nervous system indistinct; eyes absent.

Remarks.—Oligapta kruidenieri n. sp. is the only species in the genus possessing an unarmed cirrus and simple ventral clamp sclerites. Although some of the clamps in our specimens showed fractures of the ventral and dorsal sclerites, we consider these to be artifacts caused by coverslip pressure. The fractures were variable and apparently random in position in the 4 available adult specimens.

The new species appears most closely related to *O. oligapta* as shown by the morphology and position of the sclerotized vagina, and the structure of the genital atrium. It differs from this species and *O. manteri* by having an unarmed cirrus, only 3 or 4 testes (25–30 in *O. oligapta*; up to 57 in *O. manteri*), vitellaria extending anterior to level of pharynx (vitellaria coextensive with crura in *O. oligapta* and *O. manteri*), and by being less than 1 mm in length. The new species is the first of the genus reported from the Western Hemisphere.



Figs. 1–5. *Oligapta kruidenieri*: **1**, Whole mount of holotype (ventral); **2**, Sclerotized vaginal cone; **3**, Genital atrium and cirrus; **4**, Anchors; **5**, Clamp (ventral).

Oligapta Unnithan, 1957

Emended generic diagnosis.—Axinidae, Indocotylinae. Body divisible into cephalic region, trunk, haptor. Haptor with diagonal row of 8 sessile, *Microcotyle*-like clamps; 2 pairs of anchors. Prohaptoral suckers 2; pharynx small; esophagus without lateral diverticula; crura blind, terminating anterior to haptor, with or without diverticula. Testes few to numerous, postovarian, intercecal. Cirrus armed or unarmed; genital atrium midventral, armed, lying near level of bifurcation of gut. Ovary elongate, intercecal, with ends directed anteriorly. Vagina unarmed, dextral, posterior to genital atrium, with a distal sclerotized cone or peg. Seminal receptacle immediately anterior to distal portion of ovary. Vitellaria extensive in trunk. Parasites of marine fishes.

Type-species.—*O. oligapta* Unnithan, 1957, from *Hemiramphus georgeii* (Val.), Mandapom Camp, India.

Remarks.—The emendation of the generic diagnosis of *Oligapta* was made in order to accommodate *O. kruidenieri* n. sp. The presence of few testes, an unarmed cirrus, and simple clamp sclerites, the principal characters involved, are not considered at present to be sufficient to propose a new genus for this species.

Discussion

Views vary concerning the familial relationship of the Indocotylinae. Tripathi (1959) proposed the subfamily for his new genus and species, *Indocotyle hemirhamphi,* and placed it in the Discocotylidae primarily because of the presence of only 8 haptoral clamps. Tripathi (loc. cit.) did not mention the closely related genus *Oligapta,* which Unnithan (1957) had previously proposed in the Axininae of the Axinidae. Price (1962) recognized the Indocotylinae to include both *Indocotyle* and *Oligapta* but referred the subfamily to the Axinidae. Later, Yamaguti (1963) considered these genera unrelated to the Axinidae and replaced them in the Discocotylidae, while Young (1968) followed Price's classification. Based on the comparative internal morphology and the structure of the clamps, we conclude that the Indocotylinae belong in the Axinidae as originally proposed by Price (loc. cit.).

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