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Pompano, *Trachinotus carolinus* (Linnaeus), along the Coast of  
Florida**

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## LASIOTOCUS TRACHINOTI SP. N. (DIGENEA: MONORCHIIDAE) FROM THE POMPANO, *TRACHINOTUS CAROLINUS* (LINNAEUS), ALONG THE EAST COAST OF FLORIDA\*

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**ABSTRACT:** The monorchiid trematode *Lasiotocus trachinoti* sp. n. is described from the intestine and pyloric ceca of young *Trachinotus carolinus*. It is most like *L. mulli* of Bartoli and Prévot, 1966, but differs from it primarily by being smaller and having cirrus spines more evenly dispersed.

Numerous young pompano, *Trachinotus carolinus*, were examined for parasites by the junior author during a study by Iversen and Berry (1969). Sixty of 64 fish, 22 to 126 mm long, collected from three beaches on the Atlantic coast of Florida, were infected with between two and over 400 specimens of a new monorchiid trematode. There was no statistical relationship between the rate of infection and length of fish, locality, or length of time (up to 17 days) kept in aquaria.

The worms were fixed in hot A.F.A. and stained with Van Cleave's hematoxylin. Figures were drawn with the aid of a camera lucida and measurements are given in microns.

### *Lasiotocus trachinoti* sp. n.

(Figs. 1-3)

**Description** (based on 18 adult specimens): Body elongate, tapered posteriorly more than anteriorly, 346 to 654 long by 152 to 226 wide at or posterior to acetabular level. Tegument entirely spined. Forebody 122 to 226 long, 33 to 41% of body length; hindbody 163 to 370 long, 47 to 57% of body length. Eyespots anterior to, posterior to, or at pharyngeal level; usually asymmetrical. Oral sucker subterminal, 53 to 59 long by 50 to 70 wide. Acetabulum 49 to 61 long by 45 to 61 wide. Sucker width ratio 1:0.80 to 1.01. Prepharynx about ½ length of pharynx. Pharynx 26 to 35 long by 26 to 30 wide, elongate or spherical. Esophagus 17 to 58 long. Cecal bifurcation usually closer to pharyngeal than acetabular level; ceca usually extending well into testicular level.

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Genital pore median or slightly submedian, immediately preacetabular, followed by unspined genital atrium. Testis smooth, elongate, 79 to 201 long by 47 to 88 wide, approximately medial; post-testicular space 28 to 70 long, 7 to 14% of body length. Cirrus sac 88 to 159 long by 15 to 65 wide, curving from genital atrium dorsal to or around right side of acetabulum with base posterior to sucker; containing internal seminal vesicle, prostatic cells, pars prostatica, cirrus; cirrus approximately ½ length of sac with spines up to 5 long; spines evenly distributed except for few usually inconspicuous or absent basal spines.

Ovary entire or irregularly lobed, usually elongate, dextral or median, pretesticular or overlapping testis, 47 to 109 long by 28 to 79 wide. Terminal organ well developed, 73 to 112 long by 26 to 52 wide; posterior portion vesicular, unspined; anterior portion about ½ length of organ, unspined region between proximal and distal spines. Vitelline follicles in lateral fields, extending from or below level of posterior border of acetabulum to or ahead of anterior border of testis. Laurer's canal present. Uterus extending to near or slightly beyond posterior border of testis, sperm in proximal loops, entering terminal organ near junction of anterior and posterior portions. Eggs operculate, minute projection on anopercular end, 19 to 26 long by 12 to 17 wide, typically 22 to 23 by 14.

Excretory vesicle extending to posterior portion of testis; pore terminal.

**Host:** *Trachinotus carolinus*, pompano (Carangidae), type host.

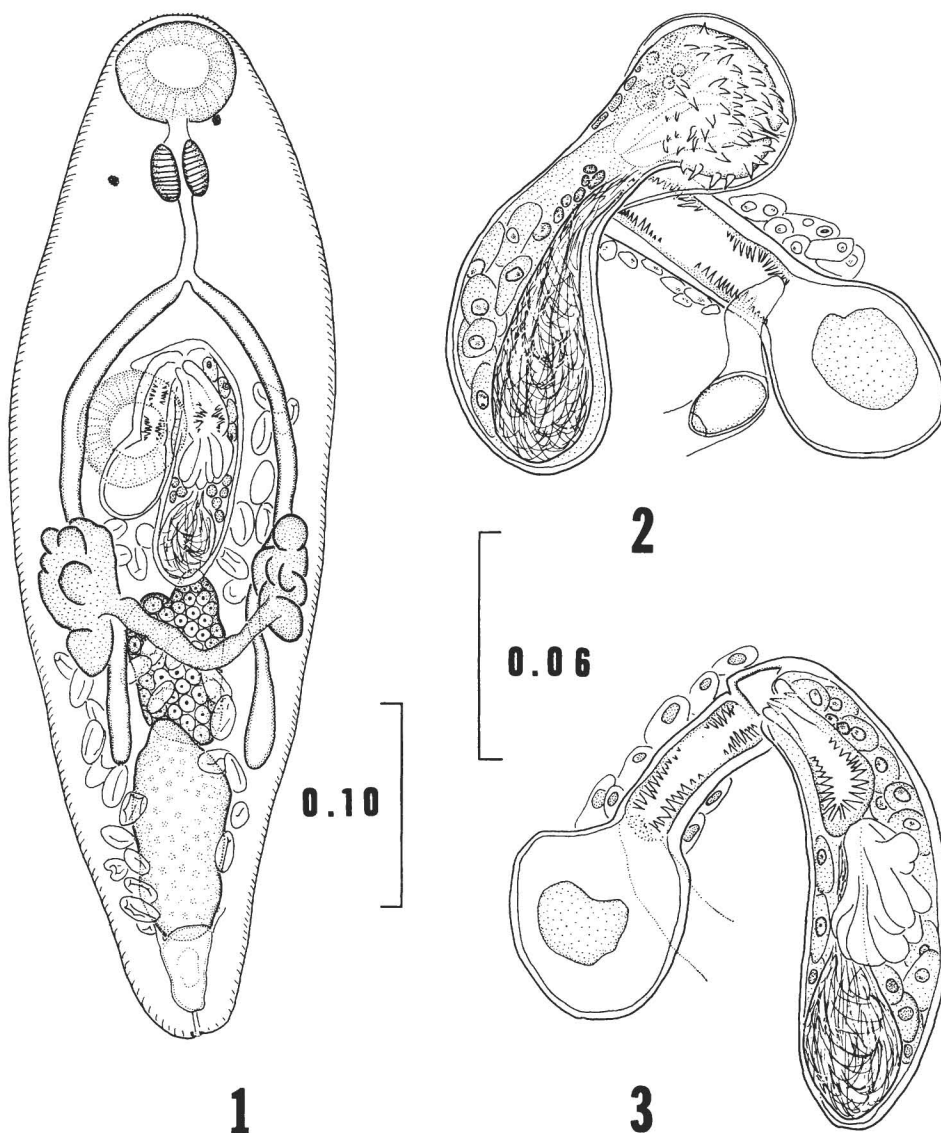
**Sites:** Intestine and pyloric ceca.

**Localities:** Fort Matanzas Beach, Butler Beach, and Crescent Beach, Florida.

**Holotype:** USNM Helm. Coll. No. 70815, para-type: No. 70816.

### Remarks

The name "*trachinoti*" refers to the type host. *Lasiotocus trachinoti* is similar to *L. mulli* (Stossich, 1883), the type species, in shape of body; general shape and position of the ovary, testis, and vitellaria; ratio of the esophageal to pharyngeal length; and sucker ratio. There are, however, some important discrepancies be-



FIGURES 1-3. *Lasiotocus trachinoti* (scale values are millimeters). 1. Dorsal aspect of holotype. 2. Ventral aspect of terminal genitalia with cirrus extruded into genital atrium. 3. Dorsal aspect of terminal genitalia showing three basal spines on inverted cirrus.

tween the only good descriptions of *L. mulli*: Dollfus (1948) and Bartoli and Prévot (1966). *Lasiotocus trachinoti* is more like those specimens described by the latter in possessing sperm in the uterus rather than a true seminal receptacle and eyespots and the uterus entering the middle of the terminal organ. The eggs in our specimens are nearer the size illustrated by Bartoli and Prévot, who did not state sizes nor dispute the large sizes reported by Dollfus. Works

by the above authors on *L. mulli* deal with specimens from *Mullus barbatus*, the type host, in the Mediterranean region. *Lasiotocus trachinoti* differs from *L. mulli* by being smaller and having distal cirrus spines evenly dispersed rather than clustered.

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