No evidence of natural infection with larvae of *A. cantonensis* was found among 150 clams (*V. philippinarum*) and 100 oysters (*C. virginica*) collected from the shores of the island of Oahu, Hawaii, nor among 50 clams collected from the island of Ulong, Palau Islands.

**Literature Cited**


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**Myzotrema cyclepti** gen. n., sp. n. (Trematoda: Monogenea) from Gills of *Cycleptus elongatus* (LeSueur) from Alabama¹

Wilmer A. Rogers²

The species described in this paper was collected as part of a survey of fish parasites being conducted by the Southeastern Cooperative Fish Parasite and Disease Project of the Agricultural Experiment Station, Auburn University. This species was collected using the 1:4,000 formalin field-collecting method described by Rogers (1966). Specimens were measured according to the procedure given by Mizelle and Klucka (1953). Measurements are expressed in microns and were made from specimens mounted in glycerin jelly or permount. Details of internal anatomy were determined from hematoxylin-stained specimens. Illustrations were prepared with the aid of a camera lucida. The keys to the genera of Ancyrocephalinae by Mizelle and Price (1964) and Yamaguti (1963) were useful in determining the status of the present species.

**Myzotrema** gen. n.

**Generic diagnosis:** Dactylogyridae, Ancyrocephalinae: Body large, elongate, with two pairs of eyespots, head organs poorly developed or lacking. Opisthohaptor well set off from body proper by stout peduncle, with two pairs of nearly similar anchors, each pair supported by a nonarticulate transverse bar; 14 marginal hooklets present. Pharynx large, heavily muscularized, perfectly round in cross-section. Intestinal crura simple, united posteriorly. Testis and ovary equatorial, overlapping. Vas deferens looped around left intestinal crus, seminal vesicle formed by dilation of vas deferens. Two prostatic reservoirs present. Cirrus a U-shaped tube with complex accessory piece articulated to base. Ovary looping around right intestinal crus. Vagina present, opening dextroventrally; submedian or submarginal. Vitellarium coextensive with intestine. Parasitic on fresh water fish.

**Type species:** *Myzotrema cyclepti* sp. n.

**Type host:** Blue sucker, *Cycleptus elongatus* (LeSueur).

**Locality:** Tombigbee River, Pickens County, Alabama.

**Remark:** *Myzotrema* gen. n. is most closely related to *Pseudomurraytrema* Bychowsky, 1957 (neoc *Pseudomurraytrema* Yamaguti, 1958) as shown by the structure of the copulatory complex and the reproductive system. It is readily separated from *Pseudomurraytrema* by

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¹ Supported by the Southeastern Cooperative Fish Parasite and Disease Project.
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having two instead of three haptoral bars. The copulatory complex of *Anoncohaptor* Mueller, 1938 (Mueller, 1938, plate 1, fig. 5) is also similar to that of the present genus, but *Anoncohaptor* has no haptoral anchors or bars. Both *Urocleidus* Mueller, 1934, and *Cleidodiscus* Mueller, 1934, have two pairs of anchors that are each supported by a transverse non-articulated bar (Yamaguti, 1963), but in neither genus does the vas deferens or ovary loop around the intestinal limbs as in *Myzotrema*.

*Myzotrema cyclepti* gen. n., sp. n.

*(Figs. 1–8)*

**DESCRIPTION:** A large form with elongate body and thin cuticle that may be finely striated. Length 1,885 (1,650 to 2,200), greatest width 301 (185 to 370) about midlength. Four eyespots present, approximately same size, posterior pair sometimes larger, members of posterior pair always farther apart. Head without lobes, head organs undeveloped or lacking. Pharynx perfectly round in cross-section, heavily muscularized, transverse diameter 131 (115 to 150). Intestinal limbs simple, uniting posteriorly. Peduncle long and stout; haptor obovate in outline with smooth margins, broader than long, length 147 (110 to 210), width 180 (170 to 210). One pair of dorsal and one pair of ventral anchors, similar in size and shape, each pair supported by a transverse bar. Each anchor composed of (1) a broad base without differentiated roots, (2) a solid short shaft grading into (3) a solid, short finely attenuated point. Anchor wings not observed. Ventral anchors (Fig. 4) often smaller than dorsal anchors; length 59 (57 to 64), width of base 36 (35 to 38). Dorsal anchor (Fig. 5) length 59 (53 to 64), width of base 38 (34 to 40). Two transverse nonarticulate bars present; ventral bar (Fig. 6) with prominent posteriorly projecting arch, dorsal bar (Fig. 7) approximately straight but with an anteriorly directed hump at midlength. Length of ventral bar 73 (72 to 75); length of dorsal bar 89 (84 to 96). Marginal hooks 14 in number, similar in size and shape (Fig. 3); small without inflated bases, length 16 (15 to 17). One hook pair is located ventrally in center of haptor while 3 pairs are located ventrally at anterior edge of haptor and 3 pairs are located dorsally in anterior one-third of haptor (Fig. 8). The median pair is situated immediately posterior to the ventral bar which according to Mizelle and Crane (1964) would be pair no. 5. Pairs 1, 2, and 3 would then be located ventrally while pairs 4, 6, and 7 would be located dorsally. Testis and ovary located slightly anterior to midlength; overlapping. Testis globose, located sinistrally in loop of ovary; vas deferens looping around left limb of intestine and running anteriorly, expands into seminal vesicle just posterior to cirrus. Copulatory complex composed of cirrus (Fig. 1) and accessory piece (Fig. 2). Cirrus a U-shaped tapering tube with an angular projection about midlength, with a complex basally articulating accessory piece. Two prostatic reservoirs empty into cirrus, one about twice as long as the other. Length of cirrus 50 (48 to 52); length of accessory piece 51 (47 to 55). Ovary vaso-shaped with elongate neck folding over testis and looping around right intestinal limb. Vagina opening ventrally, submarginal or submedian; with a long coiled tube leading into a large pear-shaped seminal receptacle. Vitellaria coextensive with intestine, confluent over most of anterior two-thirds of body posterior to pharynx.

**HOST AND LOCALITY:** Blue sucker, *Cycleptus elongatus* (LeSueur), Tombigbee River, Pickens County, Alabama.

**SPECIMENS STUDIED:** Eight.

**TYPE SPECIMENS:** Type, USNM Helm. Coll. No. 61248; 1 paratype, USNM Helm. Coll. No. 61249; paratypes in author’s collection.

**REMARKS:** *Myzotrema cyclepti* is the only described species in this genus. The nature of the copulatory complex, vagina, ovary, and other reproductive structures is very similar to those observed in *Pseudomurraytrema* species (Rogers, 1966); *P. copulatum* (Mueller) and *Anoncohaptor anomalus* Mueller (Mueller, 1938).

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A Review of the Genus *Pseudocella* Filipjev, 1927 (*Nematoda: Leptosomatidae*) with a Description of *Pseudocella triaulolaimus* n. sp.

W. Duane Hope

The genus *Thoracostoma* Marion, 1870 was separated into the subgenera *Thoracostoma* and *Pseudocella* by Filipjev (1927), the former subgenus to receive those species with lens-bearing ocelli, symmetrical, but irregularly curved spicula, and gubernaculum with apophyses directed dorsally and parallel with the spicula, and the latter subgenus to receive those species with ocellar pigment spots lacking a lens, spicula often asymmetrical but uniformly curved, and gubernaculum with paired apophyses directed posteriorly at right angles to the spicula. Later, Filipjev (1946) raised both subgenera to generic rank.

Wieser (1953) continued to treat Filipjev’s taxa as subgenera of the genus *Thoracostoma* and later added two additional subgenera, *Corythostoma* and *Synonchoïdes* (Wieser, 1956). *Corythostoma* was proposed to receive *T. kreisi* Wieser, 1953 and *T. filipjevi* Kreis, 1928 which resemble species of *Pseudocella*, but which possess a cephalic capsule with weakly developed posterior lobes separated by notches instead of incisures and which lack incisions or fenestrae, with amphids totally, or with their greatest portion, behind the posterior margin of the cephalic capsule, and ocelli absent. *Synonchoïdes* received a single species, *T. galatea* (Wieser, 1956) which also resembles species of *Pseudocella*, but which possesses a cephalic capsule reduced to a ring with a slightly notched posterior edge, no anterior lobes, with amphids completely posterior to the lobes and a buccal armature resembling that of *Synonchus* Cobb, 1893. From the two male specimens of *T. galatea*, Wieser was unable to determine if the gubernaculum possessed caudally directed apophyses.

Platonova (1962) ranked *Thoracostoma* and *Pseudocella* as genera and assigned *T. kreisi* and *T. filipjevi* to *Pseudocella* without reference to Wieser’s subgenera.

The differences between *Thoracostoma* and *Pseudocella* have remained much the same even though new species have been added to both groups. A notable exception, as pointed out by Wieser (1956), is that species of *Thoracostoma* have been described which do not possess ocellar pigment spots or lenses (Wieser, 1956; Allgen, 1951; Schuurmans Stekhoven and Mawson, 1955). Consequently, emphasis has shifted from differences in the ocelli to differences in the spicula and gubernaculum. The fact remains, however, that there are...