

***Rhynconema subsetosa*, a New Species of Marine Nematode,
with a Note on the Genus *Phylolaimus* Murphy, 1963***

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A heretofore undescribed species of *Rhynconema* Cobb, 1920 can be found regularly in sand washings from open beaches along the Oregon Coast. Adults are available throughout the year with apparently no major response in life cycle to season. The specimens described below were collected from sand in the mid-tide zone at Governor Patterson Memorial State Park near Waldport, Oregon, on September 8, 1960. Holotype (male), allotype (female) and paratypes (3 males and 3 females) are maintained on slide OSC OM 62, Oregon State University nematode collection, Corvallis, Oregon.

Rhynconema subsetosa, n. sp.

FEMALE (4): L = 0.73 mm. (0.69-0.77), a = 24.2 (22.4-27.9), b = 4.0 (3.8-4.2), c = 8.1 (7.9-8.3), V = 71.5% (70.1-73.0).

MALE (4): L = 0.67 mm. (0.61-0.76), a = 27.5 (24.9-32.8), b = 4.4 (4.2-4.8), c = 8.4 (7.7-8.8).

DESCRIPTION: Cephalic region elongate, stoma long and cylindrical. Cuticle coarsely annulated, annules being directed forward on the anterior portion of the body, and retrorse on the posterior half. Six lips, each bearing one setose papilla. There are six cephalic setae, slightly less than one-half head diameter in length, and three circles of subcephalic setae located between the amphid and the anterior circle of setae. Long, thin, cervical and somatic setae are located at regular intervals. The amphids are circular, 4.5 to 5.0 microns in diameter (slightly greater than 50% of the corresponding head diameter), and positioned immediately above the base of the stoma.

Cephalad the anteriormost region, bearing the papillae and cephalic setae, is readily differentiated from the remainder of the cephalic region by an appearance of a denser, more solid construction. Head diameter at the level of the cephalic setae is five microns, diameter at posterior end of esophagus is approximately 28 microns. Esophagus cylindrical, terminating in a moderate bulb; cardia oval, long axis directed dorso-ventrally. Nerve-ring is at 35% of the esophagus measured from the base of the stoma. Excretory pore not observed. Intestine highly refractive, lumen containing unidentified oval bodies of nine by five microns.

Female monodelphic, ovary reflexed. Male with one genital papilloid supplement one anal diameter anterior to cloacal opening. Spicula are sharply bent about midway in their length. The gubernaculum is plate-like and has a dorsal apophysis.

Tails are conical, curved ventrally: female tail 4.8 anal diameters long, male tail 3.4 anal diameters long.

REMARKS: *R. subsetosa* is most closely related to *R. hirsuta* Hopper, 1961 collected from the Gulf of Mexico, these two being the only described species of the genus with six cephalic setae rather than ten. The Oregon species differs in having a distinct bulb, males with but one preanal supplement (vs. 3 or 5? in *R. hirsuta*), and spicula with a sharp bend centrally (vs. a moderate bend proximally in *R. hirsuta*).

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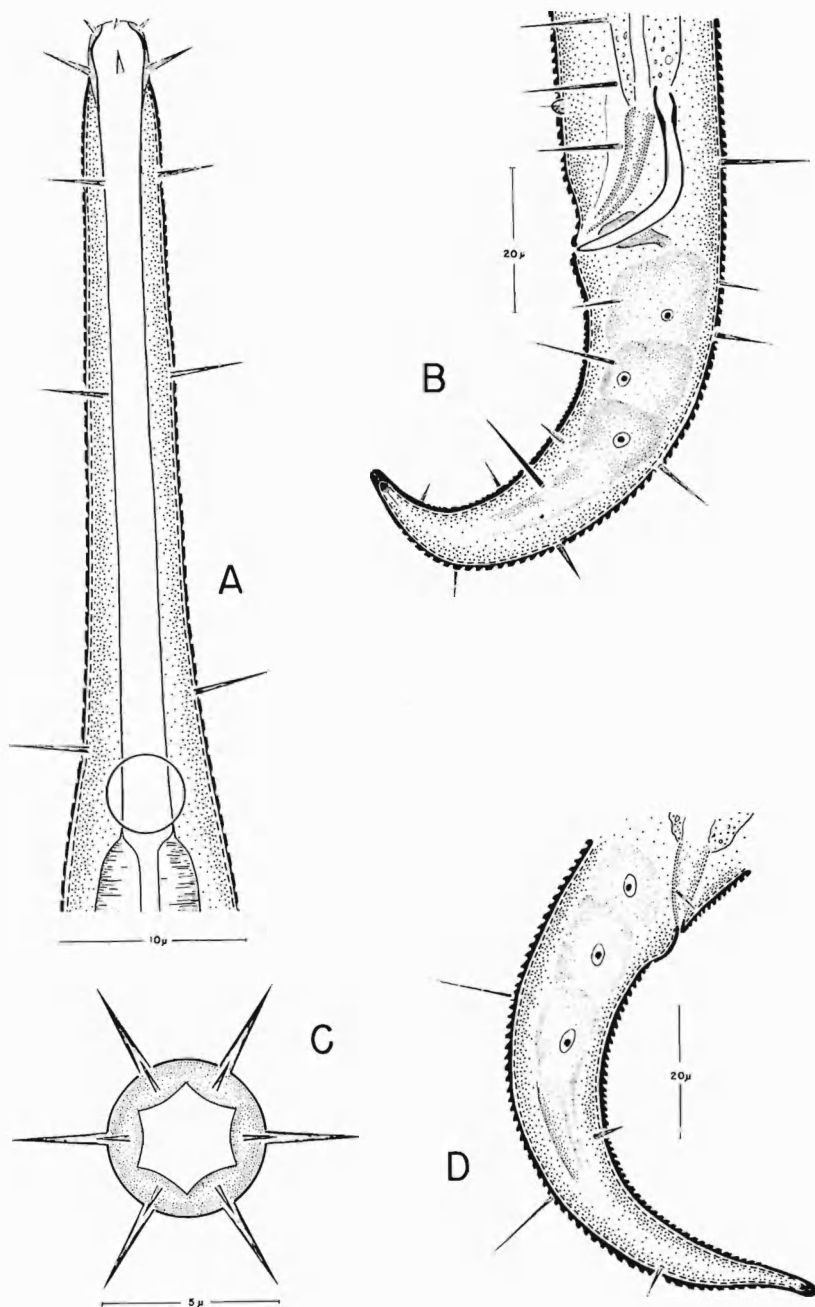


Fig. 1. *Rhyneconema subsetosa*, n. sp. A. Anterior region of male. B. Male tail. C. Face view of male. D. Female tail.

Of possible taxonomic significance the new species, in contrast to *R. hirsuta*, possesses three circles rather than one circle of subcephalic setae, and a reflexed rather than outstretched ovary in the females. This latter, especially, may only be a reflection of variation in stages of development.

PHYLLOLAIMUS Murphy, 1963

In the description of this genus I failed to assign a type species, and therefore now designate *P. tridentatus* Murphy, 1963 as type for the genus. Type specimens for the species are deposited in the Oregon State University nematode collection, slide OSC OM 56.

LITERATURE CITED

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Studies on Freshwater Larval Trematodes. Part V. A New Polyadenous Xiphidiocercaria, *C. baldi*, from Venezuela.

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While on a scientific trip to Güiria, coast of the Gulf of Paria, Dr. R. Donoso-Barros, Head of the Biology Departmente, Universidad de Oriente, and Mr. C. Flores, Instituto Oceanográfico, made a collection of snails from Quebrada Seca, a freshwater stream. Six of these snails which later proved to be the specimens of *Australorbis glabratus* (Say) were handed over to the author for the study of larval trematodes, if any. When isolated individually in glass jars containing tap water, only one *A. glabratus* emitted cercariae presented in this paper.

All observations were made on freshly emerged cercariae. Only measurements in mm. are taken on specimens relaxed in neutral red and fixed by addition of an equal volume of ten percent hot Formalin.

Cercaria baldi n. sp. (Fig. 1-2)

DESCRIPTION: Conniae subdivision of polyadenous cercariae. Body 0.264-0.350 \times 0.093-0.147. Tail 0.196-0.270 \times 0.026-0.031, lodged in a subterminal caudal depression bounded by spined caudal pockets. Body furnished with minute spines and thirteen to fifteen rows of "flagellots." Tail aspinose. Globular bodies irregularly scattered, few, not constituting a remarkable feature of cercaria. Suckers unspined. Oral sucker 0.063-0.068 in diameter. Ventral sucker 0.041-0.046, located about middle of body. Prepharynx 0.004-0.013 long. Pharynx 0.016-0.018 in diameter. Esophagus 0.013-0.018 long. Ceca extending to anterolateral border of ventral sucker. Stylet without a basal bulb, 0.033-0.039 long, Javelin-shaped. Width of shaft 0.004-0.008; width of shoulder 0.008-0.013; shoulder incomplete ventrally; when viewed from lateral side tip of stylet turned upwards. Stylet glands consisting of eight pairs, coarsely granular, anterolateral to ventral sucker, opening by two pairs of ducts at sides of shoulder. Genital rudiments C-shaped. Ex-