

a very short auxiliary branch; fossa of phallopods very small, its width barely one-fourth the diameter of the prozonite, its posterior border remote from the coxæ of the ambulatory legs of the seventh segment. Type, *P. ornatus*.

Distribution. Mexico.

The two forms here referred to *Pammicrophallus*, together with the single species belonging to the genus described below as *Zeuctodesmus*, exhibit the extreme stage in the degeneration of the phallopods exemplified by the Central-American species placed by Carl in the *Rhachodesminæ*. The first stage is the suppression of the coxal calcar shown in *Strongylodesmus*, *Rhachis*, and others, in which the phallopod is otherwise round, except for the presence of a pit or excavation on the inner side of the distal segment. The second stage is shown in the typical form of *Aceratophallus*, in which there is no definite pit on the phallopod, the two segments of which are axially in the same straight line, though the phallopods remain normal as to size; the final stage being reached in the two genera here described as new, in which the phallopods, though in some respects like those of *Aceratophallus*, are greatly reduced with respect to size, the socket that lodges them being comparatively diminished both in length and breadth.

The males of the two species referred to the genus *Pammicrophallus* may be readily distinguished as follows:—

- a.* Phallopod slender, ending distally in two slender processes, a longer and a shorter; the margin of the fossa raised in front as well as behind *ornatus*.
- a'*. Phallopod laterally bicarinate and expanded, its apex compressed and ending in a simple point; the margin of the fossa only raised behind *pictus*.

1. *Pammicrophallus ornatus*, sp. n. (Tab. XIV. figg. 3–3 i.)

♀. *Colour* (in alcohol) of fresh specimens variegated*, a median dorsal yellow spot usually visible, the keels yellow, sometimes clouded in front, between the keels and the pale spot dark brownish or bluish; head and antennæ generally darker than the legs.

Head smooth, with frontal sulcus. *Antennæ* short and hairy, moderately long, scarcely incrassate; second, third, and sixth segments subequal and a little longer than the fourth and fifth. *Body* moderately robust and wide, smooth and polished above. *Keels* well developed, but, except on the anterior segments, not overlapping; almost horizontal, slightly uptilted posteriorly; 1st tergal plate as wide as the 2nd, evenly convex above, its keels being depressed with widely rounded anterior and nearly rectangular posterior border; posterior angles of keels of 2nd and 3rd rounded, of 4th very slightly produced; from the 5th to the 19th gradually more and more produced, but blunt, not sharp, the posterior border lightly concave; anterior border nearly straight, inclined gradually more and more backwards towards the posterior end, but the backward inclination never strongly marked, the anterior angle always well emphasised, rather larger than the angle of a square, with a small external tooth which is present on all the keels from the 2nd backwards; margins of keels slightly thickened, but comparatively markedly so on the area around the pores. *Anal tergal plate* triangular, but apically truncate; *anal sternal plate* triangular, but with apex rounded. *Sternal plates* a little narrower behind than in front, their posterior border concave, transversely sulcate laterally. *Lateral surface* of segments nearly smooth; no distinct crest even on the anterior segments, above the base of the legs. *Legs* slender, in the mid-region of the body

* When dried or after many years' immersion the pattern fades away entirely or almost so.