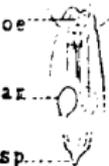


## APLECTUS, new genus

Species of this newly proposed genus have the general form of *Plectus*, but have the pharynx less definitely developed, and the renette-cell farther back and not reflexed. They differ also in having nearly obsolete lips, and a nearly cylindroid oesophagus whose small cardiac bulb is without a three-fold striated valve. The spinneret also differs from that of *Plectus*, as shown in the sketch. The male supplementary organs in the two genera also differ materially. These facts together with the marine habitat and the relative abundance of the males of *Aplectus*, appear to make necessary a separate genus for the reception of this antarctic species. The following is the type species.

3. *Aplectus antarcticus*, n.g., n. sp. The rather thin cuticle is traversed by about 700 duplex striae, which give the contour an obscurely doubly crenate appearance. Two wings, separated



oe.....	.1	12.6	21.	51 <sup>32</sup>	87.	>	.6mm.
	.8	2.2	2.3,	2.4	1.9		
ar.....	.1	14.7	20.	51	87.	>	.6mm.
	.8	2.3	2.4,	2.5	2.6		

by a distance about equal to the width of an annule, begin near the middle of the neck and end near the middle of the tail. Cervical setae, similar to the cephalic setae, occur one or two

on each lateral line; and on the male tail there are setae, one-third to one-eighth as long as the body is wide. The lips are very small and difficult to observe. The pharynx, very inconspicuous and hard to distinguish, is probably double, the narrow, tubular, anterior part extending to a little behind the amphids, the posterior part, which closely resembles the oesophagus, extending nearly halfway to the nerve-ring where there is a break in the musculature. In the lateral view there are seen close behind the cephalic setae, under the cuticle, very minute

bodies that stain, of which those most clearly seen were the dorsal and ventral ones. Probably there is a circlet of these bodies. Just behind these stained bodies, that is, a little behind the setae, there is an appearance as if of a small quadrate cavity, one-third as wide as the head. This is not a cavity, however. Its posterior limits are a trifle more than a head-width from the anterior end. The amphids are variable in size and form, being considerably larger and slightly more elongated in the male. The posterior border appears interrupted. The slender cylindroid oesophagus, is probably very obscurely Rhabditoid, and ends posteriorly in an obscurely rhomboidal to pyriform bulb or swelling, three-fifths to two-thirds as wide as the neck. The cylindroid cardia, one-fourth as wide as the body, and twice as long as wide, is really a modified part of the intestine, and is composed of small strongly staining cells. The thick walled intestine, separated from the oesophagus by a collum one-fourth to two-fifths as wide as the neck, is few, probably four, cells in girth. These cells contain numerous, indistinct, rather fine and uniform granules.

The tail, tapering from the anus, is cylindroid in the posterior two-fifths and ends in an almost imperceptibly swollen apiculate terminus one-third to one-half as wide as the base. The caudal glands are arranged in loose tandem in the anterior half of the tail; their ampullae are distinct and no wider than the ducts, but stain more strongly. The elongated renette-cell, which is difficult to observe, is as long as the body is wide, and one-fifth as wide as long, and occurs at a distance behind the neck equal to eight times the width of the body. The very slender duct, invisible except where stained, empties through a pore apparently opposite the nerve-ring. The nerve-ring surrounds the oesophagus rather squarely and is accompanied by somewhat distinct nerve-cells rather definitely grouped. From the inconspicuous, small continuous vulva the small vagina leads inward halfway across the body to the straight uteri. The rather elongated eggs are two to two and one-half times as long as the body is wide, and fully one-third as wide as long. The broad ovaries, cylindroid, but tapering near the extremities, reach three-fourths of the way back to the vulva, and contain about twelve ova, arranged rather irregularly. The spermatozoa in the uterus are of such a size that it would take at least seven or eight side by side to equal the body-diameter.

The arcuate, rather strong, sub-slender, sub-acute spicula, one and one-fourth times as long as the anal body-diameter, are slightly cephalated by expansion, the cephalum being set off by a broad shallow constriction, and lie with their proximal ends dorsal to the body-axis. There are two rather strong, sub-slender, slightly bent accessory pieces, parallel to the spicula then bending away, the applied part being one-fourth as long as the spicula. The receding part is arcuate in the same direction as the spicula, and from its end there passes a strand of muscle to the ventral body-wall behind the anus. The ejaculatory duct is one-fourth, the vas deferens and cylindroid testes one-half as wide as the body. The blunt blind ends of the testes are two-thirds of the neck's length from the cardia and one and one-half times the tail's length from the anus, respectively.

The protrudable, sub-equidistant supplementary organs are separated by a distance equal to nearly one and one-fourth times the body-diameter, and the posterior one is located at a distance in front of the anus equal to twice the anal body diameter. They are rather straight but have the distal third bent ventrally, and the distal end flattened and pulled out posteriorly into a spur, or

toe, which always remains outside the body. The entire profile contour is like that of a high boot with its leg bent backward. The projecting part is twice as long as the diameter of the tube, and is roughened at the end with ten or twelve exceedingly minute striae or warts. The proximal ends of the organs are rounded and not cephalated.

Habitat; remarks. Bay, Cape Royds. About fourteen females and six males, in good condition. The sketch is that of a female.