NEW SPECIES OF POLYCHAETOUS ANNELIDS COLLECTED AT APPALACHICOLA, FLORIDA, BY DR. A. S. PEARSE, IN 1935

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Syllidae

AUTOLYTUS GRUBE

Autolytus brevicirrata, new species

Body length about 2.5 mm.; width 0.5 mm. at anterior region, tapering to about 0.2 mm. at posterior end. Prostomium 0.5 mm. wide and 0.3 mm. long, rectangular in outline and lobed at the anterior margin. There are three pairs of eyes, the largest being situated between the most lateral and anterior pair, which are the smallest, and the fairly small more median pair. The prostomium probably bears three tentacles but only one is present in this specimen (figure 1). This tentacle is about six times as long as the prostomium. There are two pairs of lateral cirri, one pair quite short and the other nearly as long as the tentacle. The proventriculus bears no teeth and lies in somites six to ten. The dorsal cirrus of the parapodium is short compared to the tentacular cirrus, and it is about equal to one half the body width. The setae are all compound with a short beak-shaped terminal piece (figure 2). This specimen bears several sexual individuals in a chain. Each of these is about 1.2 mm. long and 0.4 mm. wide in the middle region, tapering slightly toward both ends. The body is full of eggs. The prostomium bears four short tentacles and two pairs of eyes, the large pair being most anterior.

Locality.—Appalachicola, Florida. The type is in The American Museum of Natural History (Cat. No. 2271).

Phyllodocidae

PHYLLODOCE SAVIGNY

Phyllodoce unicirrata, new species

Body length 72 mm.; width 1 mm. at anterior end and 1.5 mm. in midregion, tapering to a point posteriorly. Prostomium length and width both less than 0.25 mm. Prostomium rounded and indented at the posterior margin (figure 3). It bears two pairs of tentacles which are about as long as the width of the prostomium, and one pair of large eyes at the posterior lateral margins. There are four pairs of lateral cirri which are not quite twice as long as the width of the prostomium. The parapodia and gills are of uniform structure throughout the body. The proportion of size of the gill to that of the somite is constant, the gills and somites both being smaller at the posterior end. The gills are in the form of low cones, their broad bases attached to the notopodium for their entire length. The notopodium is lobed at the outer margin and the ventral cirrus is much reduced (figure 4). The setae are all alike,
Figs. 1 and 2. *Autolytus brevicirrata*, new species. Fig. 1, prostomium, ×30. Fig. 2, seta, ×260.

Figs. 3 to 5. *Phyllodoce uncinata*, new species. Fig. 3, prostomium, ×30. Fig. 4, parapodium from anterior body region, ×30. Fig. 5, seta, ×120.

Figs. 6 to 12. *Eupholoe globosa*, new species. Fig. 6, prostomium, ×12. Fig. 7, elytron from 15th somite, × approx. 14. Fig. 8, parapodium from 15th somite, ×25. Figs. 9 to 12, setae, ×120.
each abruptly enlarged at the apex and continued into a long, narrow spine. Near the base of this spine are a few short, sharp spikes carried on the end of the broadened portion (figure 5). There is a pair of long anal cirri.

Localities.—Appalachicola, Florida. The type is in The American Museum of Natural History (Cat. No. 2269).

Polynoidae

Eupholoe McIntosh

Eupholoe globosa, new species

Body length 50 mm.; width 3 mm. at anterior end, 2 mm. at posterior end. The tail region tapers gradually to a point. Prostomium (figure 6), length 0.5 mm., width 0.7 mm. Width greatest near the anterior end. There are two pairs of eyes, equal in size, one pair at the anterior prostomial edge and one pair at the base of the median tentacle. Median tentacle 1.2 mm. long, bearing two lateral flaps just above where it arises from the prostomium. Cirrophore of median tentacle about one-third the length of the prostomium; cirrus nearly twice the length of the prostomium. Palps twice as long as the median tentacle; colorless. The first parapodia extend forward close to the sides of the head and beyond the head a length equal to the length of the prostomium. The dorsal cirri of first parapodia are prominent and a little longer than the median tentacle. Dorsal surface of body completely covered with elytra which alternate irregularly with dorsal cirri. Elytra distinctly kidney-shaped anteriorly (figure 7) becoming slightly wider toward the posterior end. Each bears a ciliated cirrus situated just posterior to the region of attachment, besides about 15 other cirri and several patches of spines. On the parapodium (figure 8) the notopodium is rather blunt-edged, but bears a small lobe near the ventral surface. The neuropodium is also blunt but bears several small papilla-like lobes. The ventral cirrus is of medium length, acute, slender and points directly ventrally. Dorsal cirrus large and curled, and ciliated on the inner side. Dorsal-most notopodial setae long and slender and toothed on both margins. Others are shorter but have the same structure. Ventral-most on the notopodium are a few much shorter, stouter setae which are acutely pointed, and have a double row of toothed plates which become smaller toward the apex (figure 9). Setae of the neuropodia all heavy, compound and the same length as those on the ventral edge of the notopodium. The dorsal-most are heaviest, the basal joint expanding toward the apex (figure 10). The terminal joint has a slender apical and sub-apical tooth. Ventral to these some have shorter terminal joints (figure 11), beside some with long slender terminal joints and very fine apical and sub-apical teeth (figure 12).

Localities.—Appalachicola, Florida. The type is in The American Museum of Natural History (Cat. No. 2270).