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Descriptions of a New Species of *CALLIANIDEA* Ed.

BY THEO. GILL.

*CALLIANIDEA LÆVICAUDA* Gill.

The rostrum is equilaterally triangular, obtuse, and the carapace curved outwards from its base; the carapace over the external antennæ projects abruptly, and is separated from the margin above by a short fissure; the antero-lateral margins of the carapace are abruptly extended outwards, and thence curved obliquely downwards and posteriorly.

The large cheliped is smooth and polished, and is about twice as long as the carapace. The ischium is compressed and dilated anteriorly, with the articulating surface for the meros oblique and scarcely emarginate; the meros is nearly a third longer than the ischium, subovate, flat internally, convex externally above with its inferior margin anteriorly tridenticulate and hairy; the carpus is vertical, twice as high as long, and with its posterior side internally intersecting the anterior; its posterior articulating process is about as long as broad, and is divided into two unequal parts by a wide groove on its inner side; it projects acutely below, and is there tridenticulate; the manus is oblong, three times longer than the carpus, with parallel borders: its intero-superior border is provided with a long row of hairs, and its superior surface has a few distant fascicles of hair; the inferior margin is crenulated, and there is on each side a row of fascicles of hair; the digital process of the manus is about two-thirds as long as the manus itself, and it has five tubercles at its posterior half, the anterior of which is largest; anterior to this it is crenulated, as are also the margins on each side; the dactylus is moderately curved anteriorly, and crosses the digital process of the manus, leaving a hiatus; above, it is rounded, with a row of hairs on each side, the interior of which is very dense; below, the external margin of the cochleariform excavation is anteriorly crenulated, succeeded by a moderate tubercle, and posteriorly with two large ones, the posterior of which is rather an elevated apophysis; the internal border is anteriorly crenulated; a few pits with fascicles of hair are between the ridges of the cochleariform excavation and on each side.

The first pair of maxillipeds are smooth and polished on their external surfaces, and their internal margins are ciliated with long hairs. On the internal surface of the ischium there is a longitudinal, distinctly pectiniform ridge; the meros, carpus and manus have each a longitudinal row of hairs on their inner surface. The ischium is very slightly curved, and its margins are nearly parallel. The meros is shorter, with an oblique tooth internally on its anterior third, and thence more slender. The carpus is slender at its base, and internally very convex at its anterior half. The manus is narrowed from near the base to its termination. The dactylus is widest at the middle, and anteriorly rounded.

The exognath of the outer maxilliped extends beyond the middle of the meros.

The outer antennæ are about half as long as the internal, and the penultimate joint is the longest.

The median lamina of the caudal fin is rounded at the end, and its margin is not ciliated. The lateral laminæ increase progressively but little in length, and each one bears a ridge which is continued almost to the margin.

The feet of the second pair are provided with long hairs on their internal borders. The feet of the fourth pair are nearly as much compressed as the anterior, and the basilar article is much enlarged.

This species agrees very closely with the description of the *Callianidea typa* of Milne Edwards, (*Hist. Nat. des Crustacés*, vol. ii. p. 320) but on a comparison with the figures it appears to differ in the form of some of the joints of the  
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maxilliped, and in the presence of a tooth on the inner margin of the meros, as well as by the entire and plain margin of the median caudal lamina. Other differences seem to exist, which a comparison of the species would probably substantiate. The two species are also inhabitants of very distinct zoological regions, the *Callianidea typa* being a native of the shores of New Ireland, while the *C. lævicauda* was obtained under rocks, within coral reefs, at the Island of Barbados, in the West Indies. The size of the two species is nearly similar.

Description of a new genus of SALARIANÆ, from the West Indies.

BY THEO. GILL.

ENTOMACRODUS Gill.

Body naked, elongated and slender, slowly declining to the caudal. Head obliquely compressed, oblong subquadrate, and with the profile vertical. Opercula unarmed. Eyes lateral, closely approximated, situated at the angle of the profile with the postocular region. No superciliary or nasal tentacles or appendages. Branchial apertures continuous under the throat. Branchial membrane free and dilatible. Branchiostegal rays six. Mouth moderate, with the contour of the upper jaw semicircular; upper jaw protruding beyond the lower. Lips moderate, uniform and free, concealing the teeth. Teeth labial and movable, very slender and recurved, contiguous and uniserial. Lower jaw with an interior very large and recurved tooth on each side, which is received into a corresponding fossette of the palate. Dorsal fins disconnected, nearly equal to each other in length; the posterior free from the caudal. Anal equalling or exceeding the second dorsal. Caudal with its posterior margin obtusely rounded. Pectorals moderate, angularly rounded. Ventrals approximated, each with three simple rays, the internal of which is smallest.

On a comparison with a true species of *Salarias*, this genus is found to differ in its more elongated form, by the separate dorsals, and by the absence of any superciliary appendages. The canine teeth of the lower jaw are greatly developed, but they are found of nearly equal size in several species that have been referred to the genus *Salarias*. One of the species so distinguished is an inhabitant of the West Indian seas, and has been described under the name of *Salarias atlanticus*, by Cuvier and Valenciennes, in the *Histoire Naturelle des Poissons*. That species has an oblong body, superciliary appendages, and the dorsals connected at the base, and is therefore a true *Salarias*.

*E. nigricans* Gill. The elongated body, from the snout to the end of the caudal fin, is between seven and eight times longer than it is high at the pectorals; its height at the caudal is about a thirteenth of the same length.

The head is subquadrate, and forms two-ninths of the total length. Its greatest height equals two-thirds of its length. Its sides decline obliquely outwards and downwards.

The first dorsal commences near the nape, and two of its rays are in advance of the pectorals. The second dorsal commences immediately behind the first, and nearly over the fourth ray of the anal; it ceases some distance from the base of the caudal. The anal is more uniform in height than the dorsal, and ceases before it does. The caudal forms less than a fifth of the total length.

D 11, 15; A 17; P 15; V 3.

The general color of the body and fins is blackish.

A single specimen was caught in shallow water, at the island of Barbados, near Bridgetown.

[June,