

Leuckart and Mecznikow, presents us, among the Nematode worms, with a very similar example of dimorphism of sexual forms.—*Bibl. Univ.* 1865, *Bull. Sci.* pp. 154–160; abstract of ‘*Beiträge zur Naturgeschichte der Hydromedusen*, Heft 1. *Die Familie der Rüsselquallen.* Leipzig, 1865.

On some Crustacea of the French Coasts.

By M. HESSE.

In a ninth memoir on new and rare French Copepod Crustacea, M. Hesse describes numerous species of this class, most of which are found living in the interior of various Ascidians. The species belong to the genera *Doropygus* and *Dispontius* of Thorell and to four new genera proposed by the author.

Of the genus *Doropygus* the author describes twenty-one species, four of which had previously been observed by Thorell. He gives the following general table of their characters:—

Abdominal extremity	terminating in a rounded point; appendages straight, unarmed, with or without hairs; posterior thoracic process	large: <i>D. curculio</i> , <i>pulex</i> (Thor.), <i>propinquus</i> , <i>conicus</i> , <i>callipygus</i> , <i>deflexus</i> , <i>oblongus</i> , <i>rotundus</i> .
		wanting: <i>D. verrucosus</i> , <i>albidus</i> , <i>viridis</i> , <i>gibbosus</i> , <i>tumefactus</i> .
Abdominal extremity	terminated by a small cavity; appendages recurved and hooked, armed with points; posterior thoracic process	large: <i>D. gibber</i> (Thor.), <i>psyllus</i> (Thor.), <i>auritus</i> (Thor.).
		small: <i>D. acutus</i> , <i>reflexus</i> .
		wanting: <i>D. macroone</i> , <i>rufescens</i> , <i>coccineus</i> .

Most of these species occur in simple Ascidians; but the habitat of *D. oblongus* is said to be *Polyclinium stellatum*; *D. tumefactus* occurs in “an incrusting pustular Ascidian of a brown colour,” found on a *Maia squinado*; *D. rufescens* inhabits a reddish, pustular, incrusting *Eucelinius*; and *D. deflexus* was found under the cortical envelope of a zoophyte attached to the feet of a *Maia squinado*.

Of the genus *Dispontius* the author describes Thorell’s species *D. striatus*, and two new ones, *D. marginatus* and *D. conspicuus*.

Those which form the types of new genera are:—

1. GASTRODES, Hesse.

Closely allied to *Botachus*. *Female*. Body elongate, narrow in front, enlarging gradually to base of thorax; thorax of six segments; abdomen narrow, cylindrical, of five segments, the last terminated by four very strong opposed claws, which may be prehensile. Antennæ moderate, basal joint large and long; stem cylindrical, eight-jointed. First footjaw long and slender, terminated by a hooked claw; second and third stouter and shorter. Natatory thoracic feet biramose, furnished with points and hairs. Eye single, in the middle

of the forehead. The species, *G. viridis*, was found in *Ascidia intestinalis*.

2. CERATRICHODES, Hesse.

Male. Body clavate, narrow, elongate. Thorax of six segments, exclusive of the cephalothorax; abdomen of eight segments, which are very close and imbricated, with short rigid hairs at their posterior margins; abdominal appendages terminated by *long and straight hairs*. Eye? Footjaws: first long and slender, armed with a claw; the rest shorter and of equal thickness. Natatory feet biramose, garnished with spines and hairs. Opening of the genital orifices very apparent, with a corneous and denticulated border. Antennæ furnished at base with a very broad, flat, rounded appendage, covered with bristling hairs.

Female. Body pyriform, short. Abdomen short, with only three segments; abdominal appendages broad and flat, of moderate size, *armed with four crooked claws*. No eye.

The single species, *C. albidus*, occurs in a social Ascidian, of a red colour, which is found as a gelatinous layer on *Zostera*.

3. OPHTHALMOPACHUS, Hesse.

Male. Body long, narrow, claviform; thorax of five segments, including cephalothorax; abdomen of five segments, terminated by two appendages of moderate length, garnished with delicate divergent hairs. Antennæ short, thick, truncated at the end, and covered with hairs. Mouth unknown. First and second footjaws broad and short. Thoracic feet double; outer cylindrical one attached to a very thick femoral joint. Eye very large.

Female. Body short and thick; cephalic shield cordiform; thorax of five segments, including the first; abdomen of three segments, the last terminated by two appendages of moderate size, with short divergent hairs. Antennæ thick and short; eye very large.

The single species, *O. ruber*, is found in a reddish compound Ascidian, which forms a thin shining coating on *Zostera oceanica*.

4. PLATYTHORAX, Hesse.

Female. Body broad and clumsy; cephalic shield rounded, followed by three segments preceding a considerable enlargement on each side, destined to contain the ova. Between these there is a flat process, widened and emarginate behind, which supports a narrow cylindrical abdomen composed of five or six segments, terminated by flat appendages of moderate size, with rather short, divergent hairs. Antennæ slender, uniform in thickness, with numerous hairs. Eye inferior, in the middle of the frontal margin. Thoracic segments turned in at the margins; thoracic feet biramose.

The only species, *P. albidus*, inhabits the interior of a compound Ascidian, of a brown colour, incrusting the leg of a *Maia squinado*.

M. Hesse also describes the male of his *Botryllophilus viridis*, which is figured, together with the types of the above new genera, on the plate accompanying his memoir.—*Ann. Sci. Nat.* 5^e sér. tome vi. pp. 51-87.