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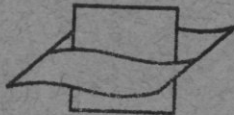
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**Bionomics of a Brackish-water Nudibranch :
Limapontia depressa.**

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BIONOMICS OF A BRACKISH-WATER NUDIBRANCH : *LIMAPONTIA DEPRESSA*.

By DR. PAUL PELSENEER.

I. GEOGRAPHICAL DISTRIBUTION.

IN the 8th part of Alder & Hancock's *British Nudibranchiate Mollusca*, 1910, p. 142, Eliot says that *Limapontia depressa* " appears not to have been found since the time of Alder & Hancock " (1862, *Ann. and Mag. Nat. Hist.*, ser. 3, vol. x, pp. 264-5), and thus has remained unknown from other localities than those quoted by them: near Sunderland, North Sea, and near Swansea, Bristol Channel.

Nevertheless, in some other stations, *L. depressa* was recorded before 1910: in Wimereux, near Boulogne (Pelseeneer, 1894, *Mém. Acad. Belg.*, vol. liii, p. 62: anatomical description, without biological account), and near Easington, Yorkshire (Petch, 1903, *Trans. Hull Sci. and Field Natural. Club*, vol. iii, p. 32); then, more recently, in Sallenelles, not far from Caen, Calvados (Gallien, 1929, *Bull. Soc. Linn. Normandie*, ser. 8, vol. i, p. 162), and in East Scotland, near Dunbar (Kevan, 1934, this *Journal*, vol. xx, p. 16).

Thus this species enjoys a rather wide distribution in both Britain and Continent (French coasts of the Channel), and as *L. depressa* is a minute creature, it has probably escaped notice in various places; but as it has a very special habitat, it could not be present everywhere.

II. HABITAT OR BIOTOPE.

In each station *L. depressa* is living in the same natural conditions: brackish pools more or less isolated from the sea, and there related only by exceptional tides.

It has also, in its various places, the same fellow-species, viz., among mollusca: *Tellina balthica*, *Hydrobia ulvæ*, *Alexia myosotis*, and often *Alderia modesta*.

Adult and larval *L. depressa* may live in sea-water, and the latter could be carried eventually by currents through the open sea. In fresh water, on the contrary, they die. Besides, *L. depressa* lives also, for a rather long time, out of the water, in a damp atmosphere.

III. BREEDING HABITS AND DEVELOPMENT.

(1) *Breeding Season*.—Not only during the months November-December, then once more April-May, but also in January-February (Gallien) and March (Pelseeneer). Thus during a very large part of the year, over seven months.

(2) *Egg Clusters and Number of Eggs*.—The nidamental ribbons or egg clusters are as long as the laying animal, 6–7 mm., sometimes more (1 cm.). The deposition of a cluster ends in a few minutes. The number of eggs in a ribbon is about 400, or nearly the same number as in *Limapontia capitata* in the Mediterranean Sea (Vayssière, 1903).

(3) *Development*.—A. Conformation of the hatched young. The Limapontiidæ are the only family of Nudibranchs where the young of some genera hatch with the adult form (“ephelicimorphic”): *Cenia cocksii* (Pelseneer, 1899; Colgan, 1912), *Vayssièrea caledonica* (Risbec, 1928). In *L. depressa* the hatching, as could be expected from the great number of eggs, takes place with veliger free larvæ, as in the adjoining species *L. capitata*, and in other genera of Ascoglossa: *Ercolania*, *Hermæa*, *Alderia*, *Elysia*.

B. Length of embryonic life: in *L. depressa* this period covers three or four weeks, thus more than in *L. capitata* (16–17 days). In the latter, however, observations were made in summer (June) and in *L. depressa* in winter (February), and the different durations are caused by the differences of season: always higher temperature accelerates development and hatching.

