



The genus *Leptoplana* (Leptoplanidae, Polycladida) in the Mediterranean basin. Redescription of the species *Leptoplana mediterranea* (Bock, 1913) comb. nov.

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Abstract

A revision of the genus *Leptoplana* Ehrenberg, 1831 in the Mediterranean basin is undertaken. This revision deals with the distribution and validity of the species of *Leptoplana* known for the area. The Mediterranean sub-species polyclad, *Leptoplana tremellaris* forma *mediterranea* Bock, 1913 is elevated to the specific level. *Leptoplana mediterranea* comb. nov. is redescribed from the Lake of Tunis, Tunisia. This flatworm is distinguished from *Leptoplana tremellaris* mainly by having a prostatic vesicle provided with a long diverticulum attached ventrally to the seminal vesicle, a genital pit closer to the male pore than to the female one and a twelve-eyed hatching juvenile instead of the four-eyed juvenile of *L. tremellaris*. The direct development in *L. mediterranea* is described at 15 °C.

Key words: *Leptoplana tremellaris*, planarian, turbellarian, embryonic development, juvenile, Tunisia

Introduction

The genus *Leptoplana* is one of the most controversial genera within the suborder Acotylea. A reason for this controversy can be found in the fact that the anatomy of the copulatory organs (female and male) of the type species, *L. tremellaris*, differs clearly from the rest of the species that belongs to or has belonged to the genus (Hyman 1939). Since its establishment in 1831 by Ehrenberg, more than 120 polyclads have been described as *Leptoplana*, but after the revisions of different authors, mainly Faubel (1983, 1984) and Prudhoe (1985), the genus is actually constituted by only 3 valid species:

L. tremellaris (Müller OF, 1773) Oersted, 1843: North Sea, Mediterranean Sea

L. vesiculata Hyman, 1939: only known from Mount Doughty, Puget Sound, Washington (North Pacific Ocean)

L. trapezoglana (Schmarda, 1859) Diesing, 1862: only known from Weligama Bay, Sri Lanka (Indian Ocean)

The genus was created by Ehrenberg (1831) for the species *Leptoplana hyalina* found in the coasts of the Red Sea near El-Tor. Unfortunately, the description is limited to external morphological features and is deemed unrecognizable (Lang 1884, Prudhoe 1989). Nonetheless, Lang in 1884 accepted the genus described by Ehrenberg in 1831, considered that the species *L. hyalina* is very similar to *Planaria tremellaris* (Müller OF, 1773) and