

# Preliminary check-list of Cymothoids (Crustacea: Isopoda) parasitic on marine fishes from Lebanon

by Michel Bariche and Jean-Paul Trilles

**Abstract.** This article provides the first annotated list of the cymothoid fauna (Crustacea: Isopoda) from Lebanon. Three genera (*Anilocra*, *Nerocila* and *Ceratothoa*) are represented by seven species. The specimens correspond to: (1) species already known and reported from different parts of the Mediterranean Sea (*Anilocra physodes*, *Nerocila bivittata*, *Ceratothoa italica*, *C. oestroides*, *C. oxyrrhynchaena*), especially from the western basin; (2) two specimens belonging to a new species or a Mediterranean form of *Ceratothoa collaris*, a common species along the North-Western coasts of Africa; and finally (3) other specimens suggesting the presence of a new species belonging to the genus *Nerocila*.

**Kurzfassung.** In dieser ersten kommentierten Übersicht der Cymothoidenfauna (Crustacea: Isopoda) von Libanon werden sieben Arten aus den drei Gattungen *Anilocra*, *Nerocila* und *Ceratothoa* behandelt. Es können drei Gruppen unterschieden werden: (1) Arten, die bereits aus anderen (besonders westlichen) Teilen des Mittelmeeres bekannt sind (*Anilocra physodes*, *Nerocila bivittata*, *Ceratothoa italica*, *C. oestroides*, *C. oxyrrhynchaena*); (2) eine bisher nicht beschriebene Art bzw. mediterrane Form von *Ceratothoa collaris*, die an der Nordwestküste Afrikas häufig ist; (3) eine offenbar noch unbeschriebene Art der Gattung *Nerocila*.

**Key words.** Cymothoidae, parasitic isopods, parasites, fishes, Lebanon, Mediterranean Sea.

The cymothoids (Crustacea, Isopoda) are parasites on marine, freshwater or brackish water fishes. They possess certain important ecological and ecophysiological characteristics (TRILLES 1994): (1) they are always ectoparasites, living attached to the sides, fins, buccal and branchial cavities of fishes (TRILLES 1969); (2) they are haematophagous, feeding on their host's blood by producing an anticoagulant substance from their latero-oesophagus glands (ROMESTAND & TRILLES 1976); (3) they are protandrous hermaphrodites, with sexual inversion depending on an androgenic function itself dependent on a neurohormonal regulation (TRILLES 1963, JUHAULT & LEGRAND 1965).

Along the coast of Lebanon the only record of cymothoids known to us is of one specimen of *Codonophilus* sp. from Tyr (southern Lebanon), which was considered unidentifiable by MONOD (1931). In addition to the importance of studying the cymothoids of Lebanon, the entire region is being invaded by alien species from the Red Sea in a process known as Lessepsian migration (POR 1978). We report on and describe here the first collection of Cymothoidae from Lebanon which comprises three genera and certainly seven species. For each species, we give the geographical range, potential hosts and make some comments on the collected specimens. For more detailed information, refer to TRILLES (1994) and HORTON (2000). All specimens were fixed in 70 % ethanol and have been deposited in the Marine