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PARASITIC CRUSTACEANS OF ADRIATIC FISHES*

BRANKO M. RADUJKOVIĆ

Institute of Marine Biology, University Veljko Vlahović Titograd
85330 Kotor, Yugoslavia

PASOŻYTNICZE *CRUSTACEA* RYB ADRIATYKU

Abstract. 45 species of *Copepoda* and 14 of *Isopoda* have been found on the South Adriatic (Montenegrian coast) fishes during the 10 years study. In addition to the check-list, some results of pathological and haematological investigations, showing that these parasites have a considerable impact on the growth, condition index and physiological state of hosts, are given.

Between 1978 and 1988, 124 specimens of Adriatic fishes have been examined parasitologically. The fish was caught by different fishing near in the Montenegrian fishing area (41° 31′ N – 42° 31′ N and 18° 20′ E – 19° 29′ E).

Check-list of found copepods

Bomolochidae: *Bomolochus soleae*
Taeniacanthidae: *Taeniacanthus balistae, Phagus murenae*
Ergasilidae: *Ergasilus gibbus, E. lizae, Nipergasilus bora*
Chondracanthidae: *Chondracanthus horridus, Ch. merluccii, Ch. zei, Lernentoma aselina, Strabax monstrosus*
Philichthyidae: *Colobomatus mugilis, C. mulli, C. pagelli, Sphaerifer leidigi*
Caligidae: *Caligus apodus, C. diaphanus, C. mauritanicus, C. minimus, C. mugilis, C. vexator, Lepeophtheirus nordmanni*
Hatschekiidae: *Hatschekia pagellibogneravei, H. pygmaea, Congericola pallidus*
Lernanthropidae: *Lernanthropus gisleri, L. mugilis, L. vorax, Lernanthropus* sp.
Pennellidae: *Alella pagelli, Clavellopsis characis, C. fallax, C. sargi, Eubrachiella exigua, E. mugilis, Lernaeopoda galei, Neobrachiella bispinosa, N. insidiosa, N. merluccii, N. richiardii*
Naobranchiidae: *Naobranchia cygniformis*

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Check-list of found Isopods

Cymothoidae, ***Anilocrinae***: *Anilocra frontalis*, *A. physodes*, *Nerocila bivittata*, *N. maculata*, *N. orbignyi*, *N. rhabdota*; ***Cymothoinae***: *Ceratothoa italica*, *C. oestroides*, *C. oxyrrhynchaena*, *C. parallela*, *C. steindachneri*, *Emetha audouini*, *Lironeca sinuata*, *Mothocya epimerica*.

Pathological impact of parasitic Crustaceans on their host fish

The previous investigations (Radujković and Petrović 1986) have shown the significant negative impact of Copepods on condition index of mullets. But, our new results, proving the influence of season, spawning, migration etc., have thrown a new light to this topic. However the additional studies are indispensable.

As far as *Isopoda* are concerned, the results of host – buccal parasite model study (*Spicara smaris* – *Emetha audouini*) confirmed those of Romestand (1978) and Radujković (1982): Isopods provoke, besides anatomical malformations, the significant growth lagging of their hosts. For other Isopod species which inhabit different "ecological niches", we have no data available.

Parasitized hosts show, also, an anemia are spleen hypertrophy (Romestand and Trilles 1977). These phenomena the confirmed by our examination of mullets. Besides the increase in erythrocytes' volume was also stated (Radujković et al. 1983). Surface and deeper injuries, anemia and changes of blood picture, spleen hypertrophy and haematopoietic disfunction, lead toward a dicreasing of condition index (3-15% with mullets, depending on species and intensity of infestation) and, in the cases of heavy infestation, especially if Copepods and Isopods are associated with other parasites, to growth lagging of the host.

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