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The Occurrence of *Lepeophtheirus insignis* Wilson (Copepoda parasitica) in New Zealand Waters and Its Relationship to *L. molae* Heegaard

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Abstract

SPECIMENS of *Lepeophtheirus* from the sunfish (*Mola mola* L.) taken in New Zealand waters are identical with cotype material of *L. insignis* Wilson. Paratype specimens of *L. molae* Heegaard from Australian waters differ from *L. insignis* only in the shorter, wider genital segment, in the much greater development of the rudimentary fifth pereiopods and in the further suppression of the rudimentary sixth pereiopods, and these two species are clearly closely related.

FOUR male and four female specimens of *Lepeophtheirus*, taken from the skin of a specimen of *Mola mola* brought ashore in a seine net off Rona Bay, Eastbourne, on 30.11.1960, were lent to the author by the Dominion Museum, Wellington. Examination showed them to be very similar to descriptions of both *L. insignis* Wilson, 1908 and *L. molae* Heegaard, 1962. In order to resolve their identity the author borrowed one male and one female cotype of *L. insignis* together with three male and three female specimens identified as such by C. B. Wilson from the United States National Museum (Cat. no. U.S. 74370) and four female paratypes of *L. molae* from the Australian Museum (Cat. no. G.5213). Unfortunately Heegaard's single male specimen could not be located.

After comparison, it was found that the females of all three lots were morphologically similar in every respect, except that in the New Zealand and North American material the sixth pereiopods are obvious, consistently flattened, carrying three setae, the fifth pereiopods are minute; the genital segment is more than half the length of the carapace and longer than wide; in the Australian material the sixth pereiopods are smaller and lack setae, but the fifth are elongated, large and obvious, while the genital segment is less than half the length of the carapace and wider than long. From the literature it appears that the specimens figured and described by Barnard (1955, p. 169, fig. 11) as *L. insignis* are similar to the Australian material.

Heegaard noted the great similarity between his material and Wilson's. Of the differences suggested by Heegaard (p. 171), the "spine on the carapace"