

Lebour's (1928) record of a *Pinnixa* rests on her identification of a zoea taken by the "Terra Nova" Expedition and figured by Gurney (1924: 196). No adults of this genus have even been recorded, and it seems that this larva would be better placed in the Hymenosomidae. Its resemblance to *Pinnixa* lies in the curious enlargement of the fifth and sixth somites of the abdomen into thin lateral plates which overlap the telson. The latter shows some resemblance to *Pinnixa* as figured by Aikawa (1929, Fig. 46) but is even closer to that of the hymenosomids *Halicarcinus* (obtained by the writer) and *Rhynchoplax* (Aikawa, 1929, Fig. 39). Comparing the maxillules of this zoea with those of *Pinnotheres ostreum*, *P. maculatus*, and *Pinnixa sayana* (Hyman, 1924, Figs. 10, 24, and 43) on the one hand, and with the hymenosomids *Halicarcinus* and *Trigonoplax* (Aikawa, 1929, Figs. 49 and 50) on the other, it is found that Gurney's zoea resembles the hymenosomids in the presence of a seta on the basal segment of the endopodite, and in the presence of two groups of setae on the coxa. None of the pinnotherids show these features. Similarly, the maxillae of Gurney's zoea resemble those of *Trigonoplax* (Aikawa, 1929, Fig. 27) in having a coxa bearing a single seta, whereas those of the pinnotherids referred to (Hyman, 1924, Figs. 12, 25 and 44) all have several setae on the coxa. Aikawa considered that Gurney's zoea should be referred to the Hymenosomidae.

N.Z. Records of *P. pisum*

The persistent and interesting records of the European *P. pisum* in New Zealand faunal lists have been originated by Heller (1868), who described material collected by the "Novara" expedition. He could find no difference between New Zealand specimens and those from European waters apart from the fact that "the hind leg seems to be somewhat less hairy". He apparently did not consider this difference justified the erection of a new species.

The inclusion of *P. pisum* by Miers (1876) in his catalogue might be taken as confirmation of this identification. However, as remarked by Hutton (1882), Miers listed all species recorded from New Zealand and much of his material was not of neo-zelanic origin.

Filhol (1885) listed *P. pisum* as indeed he listed all species included in Miers' catalogue, but it appears from the text that he did not personally collect *P. pisum* in New Zealand but referred all his specimens to a new species, *P. novaezelandiae*.

Thomson (1913 and 1921) referred Otago specimens to *P. pisum* whereas Chilton (1911) seemed to have abandoned his earlier view (1906) that *P. pisum* was common and referred his collection to *P. novaezelandiae*.

The records of Borradaile (1916) and Gurney (1924) would seem to carry more weight, since the localities are almost certainly authentic and European material should have been available for comparison. The view of the writer is that these records rest on mis-identification, but the matter will be discussed further below when the species have been described in more detail.

Although Chilton and Bennett (1929) did not revise the Pinnotheridae, they listed the species recorded from New Zealand with the comment: "This is by no means a satisfactory list. *P. pisum* for example is the European species and is probably correctly identified . . ." I am informed by Dr Bennett (pers. com.) that the word "not" has been omitted before "correctly" and this alteration certainly improves the sense of the paragraph.

Comparison of *P. novaezelandiae* and *P. pisum*

The systematic problems of the New Zealand Pinnotheridae were first encountered by the writer when larvae of the common pinnotherid of Banks Pen-