

mature form. He also described one of its young stages, which has the number of appendages of a *Zoëa*, but in which caudal appendages are already developed.

“On our voyages in the ‘Challenger’ we have caught several specimens of *Amphion* and of its larvæ; and I am now able to produce drawings, not only of the *true Zoëa* with a simple telson, but also of all the intermediate stages between it and the adult form with two, three, four, five, and six pairs of walking-legs. Of the full-grown *Amphion* I have examined three specimens, two of which are undoubtedly males, as the testes (and the branchiæ) were plainly visible, the former opening into the last pair of legs.

“There is now no doubt that *Amphion* is not a larva, nay, even that there are several species and perhaps genera of this remarkable form.

“We have caught two very interesting mature animals which are certainly closely allied to *Amphion*. One of these has enormously long eye-stalks, which, having a length of 7 millims., are just as long as the whole animal’s body.

“Another form has got very long eye-stalks too, but is especially remarkable for the antepenultimate joints of its pereopods, being large paddle-shaped organs, terminated by a very small end-joint. Both have got, like *Amphion*, a central (Naupliar) eye and eight pairs of branched legs; but their body is more *Sergestes*-like and less flat than that of *Amphion*. They certainly belong both to the same genus, and may be called *Amphiones* until more than one specimen of each has been obtained.

“To me these Amphionidæ are especially interesting, as I can compare them with the larvæ of *Sergestes* and *Leucifer*, the former of which have also got eight pairs of branched legs and the central eye which persists in the Amphionidæ.

“There are good reasons for the statement that the larvæ of *Leucifer* and *Sergestes* pass through an *Amphion* stage; and this, it seems to me, throws a good deal of light on the relations and systematical position of *Amphion* itself.

“Dohrn, to whom we owe so many fine discoveries concerning the pelagic Crustacea, has described,¹ under the name of *Elaphocaris*, a small and very spiny *Zoëa*, caught in the harbour of Messina. He calls it the larva of a Decapod without fixing its position. This small larva was often seen by me in the Atlantic; but I only lately found out that *Elaphocaris* is the larva of a species, or rather of some species, of *Sergestes*. There is, however, one species of this genus in which the *Zoëa* is not an *Elaphocaris*, but a larger, less spiny form, similar, however, in all other respects to the former. Of the species which develops with an *Elaphocaris*-stage in the Western Pacific, I have collected numerous specimens of all the stages, from the youngest *Zoëas* up to the mature animal. The mode of development is very simple. After the first moulting the larva gets six more branched legs and loses many spines. It enters the *Amphion* stage, then moults, throws the branched legs off, gets branchiæ, and becomes a young *Sergestes*. Only after this last moulting the central eye, hitherto present, disappears.

¹ *Zeitschr. f. wiss. Zool.*, Bd. xx. p. 662, tab. 31, fig. 28.