NOTES ON SOME INDO-PACIFIC PONTONIINAE, XXV

FURTHER OBSERVATIONS UPON PERICLIMENES NOVERCA KEMP, 1922, WITH THE
DESIGNATION OF A NEW GENUS ZENOPONTONIA, AND SOME REMARKS UPON
PERICLIMENES PARASITICUS BORRADAILE (DECAPODA NATANTIA, PALAEMONIDAE)

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The rare shrimp Periclimenes noverca was first described by Kemp in 1922 on
the basis of a single ovigerous female collected from New Caledonia. There were
no further records of this species until the discovery of a second specimen, from
the Great Barrier Reef, Australia, was reported (Bruce, 1971). Shortly after,
through the kindness of Dr. D. J. G. Griffin and Miss E. Pope, I was able to
examine some further specimens from Noumea, New Caledonia, in the collection
of the Australian Museum.

The examination of these fresh, beautifully preserved specimens clearly showed
that the large hepatic spine was distinctly mobile, a feature that has not been
recorded in any species of Periclimenes and one that would have been easily over-
looked in less well preserved material. Dr. J. Forest, of the Museum National
d'Histoire Naturelle, Paris, in whose collection the holotype is still preserved, has
recently reexamined the specimen on my behalf and confirmed that the hepatic
spine is undoubtedly mobile. The occurrence of this feature means that this species
can be confused with the genus Paranchistus Holthuis, an associate of bivalve
molluscs, when using the keys to genera provided by Holthuis (1952, 1955). The
only other pontoniinid genus known to have a mobile hepatic spine is the recently
described genus Allopontonia, which is also associated with echinoderms (Bruce,
1971). The designation of a new genus for this species is therefore rendered
necessary to clarify its relationship to other species of Periclimenes and to the
genera Paranchistus and Allopontonia.

A number of specimens of Periclimenes noverca have also recently been obtained
from East African waters, representing a considerable extension in the distribution
of the species and also an increase in the variety of hosts with which it is asso-
ciated.

Zenopontonia gen. nov.

Diagnosis. — A medium-sized, round-bodied shrimp. Carapace and abdomen
smooth. Rostrum well developed, compressed, dorsally dentate. Supra-orbital spine
absent. Antennal spine present. Hepatic spine distinct, mobile. Inferior orbital
angle produced. Abdominal segments with rounded pleura. Telson elongate, with two pairs of dorsal spines and three pairs of posterior spines. Eyes well developed, cornea globular. Antennule normal, with basal segment bearing long slender stylocerite; disto-lateral angle produced, with small tooth; intermediate and distal segments short. Upper and lower flagella well developed; upper flagellum biramous, with rami fused proximally. Scaphocerite broad, with well developed disto-lateral tooth, exceeded by lamella; flagellum long and slender. Epistome unarmed. Mandible without palp; molar and incisor process feeble. Maxillula with simple palp, upper lacinia broad, lower lacinia slender. Maxilla with simple palp, endite feebly bilobed, scaphocerite broad. Small, well developed exopods on all maxillipeds. First maxilliped with setiferous palp; caridean lobe large, epipod bilobed. Second maxilliped normal with large epipod, without podobranch. Third maxilliped with slender endopod, rounded epipod and small arthrobranch. First pereiopod stout, chela spatulate. Second pereiopods well developed, subequal, similar. Ambulatory pereiopods robust; dactyls short and stout, without accessory spines. Merus of second to fifth pereiopods with acute disto-ventral tooth. Fourth thoracic segment unarmed. Pleopods normal. Uropods with protopodite acutely produced disto-laterally, rami broad, exopod with large disto-lateral mobile spine.

Type species. — *Periclimenes* (*Periclimenes*) *noverca* Kemp, 1922.

Systematic position. — The features of particular importance in assessing the systematic position of *Zenopontonia* include the following: 1, the rostrum is well developed, compressed, with a well developed series of teeth along the dorsal margin; 2, hepatic spines are present and mobile; 3, the chelae of the first pereiopods are spatulate; 4, the meri of the ambulatory legs are armed with disto-ventral teeth; 5, the dactyls of the ambulatory legs do not have a small accessory spine; 6, the protopodite of the uropod is acutely produced posterolaterally.

*Zenopontonia* is related to *Periclimenes*, *Allopontonia* and *Paranchistus*. The main similarities and differences are outlined in the following table (the few exceptions are dealt with below).

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<th><em>Periclimenes</em></th>
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*Zenopontonia* is immediately separated from all species of *Periclimenes*, by the presence of the strongly developed, highly mobile hepatic spine. The numerous species of *Periclimenes* present a wide range of variation in morphological features and most species show little resemblance to *Zenopontonia*. Several of the unusual features of *Zenopontonia* are also found isolated in various *Periclimenes* spp. which will be discussed in more detail later.

In contrast to *Paranchistus*, *Zenopontonia* does not have a thickened rostrum.