Male first pleopod long, stout, distal aperture a narrow, short apical slit enclosed by fleshy folds on medial surface, a tuft of long setae arising just below aperture; pleopod otherwise densely setose on abdominal surface and close to tip on lateral surface. Second pleopod about ½ length of first, apically blunt, weakly setose.

IN LIFE: Carapace and legs uniform bright orange above, lighter below tending to cream, fingers of cheliped black. (A. Baker, pers. comm.)

The new species is characterised by the spinous chelae and the possession of well developed lateral rostral and supraorbital spines. With *P. profundarum* alone among species of *Paromola* it shares a triangular fourth ambulatory propodus. In general appearance, *P. spinimana* resembles *P. cuvieri* and *P. japonica.*

The gill formula of the new species has not been given here. Since only one specimen was available for study it was considered unwise to damage it simply to provide this character while so many others were available to distinguish the species.

## GENERAL DISCUSSION

The family Thelxiopidae has so far not received a great deal of attention. It is probably due to this that certain characters which have been used to diagnose genera and species appear somewhat trivial and likely to lead to confusion if emphasized. The presence or absence of a distal spine on the basal segment of the antenna has already been mentioned in this regard. Characters which are probably important and have not so far been used extensively are the development of the supraorbital spine, the shape of the male chela, the form of the male first pleopods and perhaps the shape of the propodus of the fourth ambulatory leg.

Gordon (1950, p. 220) considers, on the basis of branchial formula, that *Latreillopsis petterdi* should be placed in the genus *Paromola.* She has found that two species of *Latreillopsis, L. laciniata* Sakai and *L. bispinosa* Henderson have a branchial formula of 10 gills plus 4 epipodites and that two species of *Paromola, P. cuvieri* and *P. profundarum,* have 14 gills plus 6 epipodites while *P. alcocki* has 13-14 gills and 5-6 epipodites; *L. petterdi* has 14 gills and 6 epipodites. Gordon does have some reservations about placing *L. petterdi* in *Paromola* for she writes (p. 202), "The systematic importance of the branchial formula may have been exaggerated by previous workers on the Dromiacea and I may be inconsistent in accepting a wide range of variation in the genus *Pseudodromia* and refusing to accept it in the genus *Latreillopsis* . . . Where there is a marked tendency to gill reduction in a family there seems no reason why the species in any one genus should not also show the same trend".

In comparing *L. petterdi* with other species of *Latreillopsis* and *Paromola* the following similarities and differences will be noticed. *L. petterdi* agrees with species of *Latreillopsis* and differs from *Paromola* species in that the spines on each side of the medial rostral spine (? lateral rostral spines) are much longer than the latter, the distal segment of the eyestalk is much shorter than the basal segment and very bulbous and the hepatic region of the carapace is well expanded and strongly spinous. *L. petterdi* differs from *Latreillopsis* and agrees with some *Paromola* species (*P. profundarum, P. spinimana*) in having the fourth ambulatory propodus expanded midway along and ventrally spinose distally. In several other characters such as the carapace being widest posteriorly (*Latreillopsis* species appear to be widest anteriorly due to expansion of hepatic regions) and the generally tuberculate to spinous nature of the carapace and legs, *L. petterdi* agrees with some species of both genera. In view of the above facts and the reduction in gill number in closely related species of other families of Brachyura (see Hartnoll, 1964; Hiatt, 1948) it seems wiser to leave a decision on the systematic position of *L. petterdi* to the context of a general revision of the Thelxiopidae, or at least until characters likely to be of value in the taxonomy of these crabs have been investigated more fully.