

The 23 engagements of males and the 20 of females are reduced to 12, of which ten are relatively feeble.

Again no detailed investigation was made of the engagements of chelipeds against carapace.

D. Comparisons of males in other species of the *O. punctatus* subgroup with *O. australiensis*

No males are available in *O. elongatus*, and only a single male of *O. punctatus* with flexible joints was available (82mm, Oshoro, Japan, don. Hokkaido Imp. Univ.; coll. Madoka Sasaki, USNM). Several flexible males were available of *O. trimaculatus* and *O. catharus*.

I. Engagements of cheliped rasps with walking leg plectra

Throughout engagements were very similar to those in *O. australiensis* and the only minor differences noted were as follows:

(26)—loud noises in *O. australiensis* and *O. punctatus*, faint in *O. trimaculatus*, none in *O. catharus*.

(27)—loud in *O. australiensis*, faint in *O. trimaculatus*, none in *O. punctatus* and *O. catharus*.

(24) and (29)—“natural” engagements in *O. australiensis* and *O. punctatus*, “unnatural” in *O. trimaculatus* and *O. catharus*.

The sounds produced by equivalent engagements differed from species to species. Thus in *O. punctatus* compared with *O. australiensis*:

(i) The striae on the palm are larger, deeper, coarser and less numerous (13–20 cf. 17–24), producing more distinctly pulsed sounds. The same applies to the granules on the under surface of the palm.

(ii) The innermost carina beneath the immovable finger is conspicuously developed and bears large ovoid granules lying transversely, resembling a shorter version of the palm striae. Engagements produce louder and more pulsed sounds than in *O. australiensis*.

(iii) In engagement (11) (palm striae against 2nd meral collar), the inner boss is slightly less developed and the outer boss more developed, so that both act as plectra and not merely the inner boss as in *O. australiensis*.

(iv) In engagements (23) and (24), the first and second dactyls engage primarily with the salient central carina on the outside of the palm rather than with the lower one as in *O. australiensis*.

When *O. trimaculatus* is compared with *O. australiensis* the differences are as follows:

(i) The striae and the granules distal to them are smaller, more numerous (viz., 26–31 striae), shallower and finer, and give an increased frequency of pulses.

(ii) The under surface of the immovable finger is broadly rounded rather than carinate or bicarinate and is beset with small granules, again giving increased frequency of pulses.

(iii) The outer surface of the hand is more finely granular and with a relatively feebly-developed carina. Engagements produce feebler noises.

(iv) In engagement (26) the more salient inner boss of the first merus is more important than the outer boss in engaging with the outer surface of the palm.

When *O. catharus* is compared with *O. australiensis* the differences are as follows:

(i) The striae are shallower, smaller and slightly more numerous (viz., 20–26). The under surface of the immovable finger is not distinctly bicarinate, but is broadly