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**EUDACTYLOPUS KRUSADENSIS, A NEW SPECIES OF HARPACTICOID COPEPOD FROM KRUSADI ISLAND, IN THE GULF OF MANAAR.**

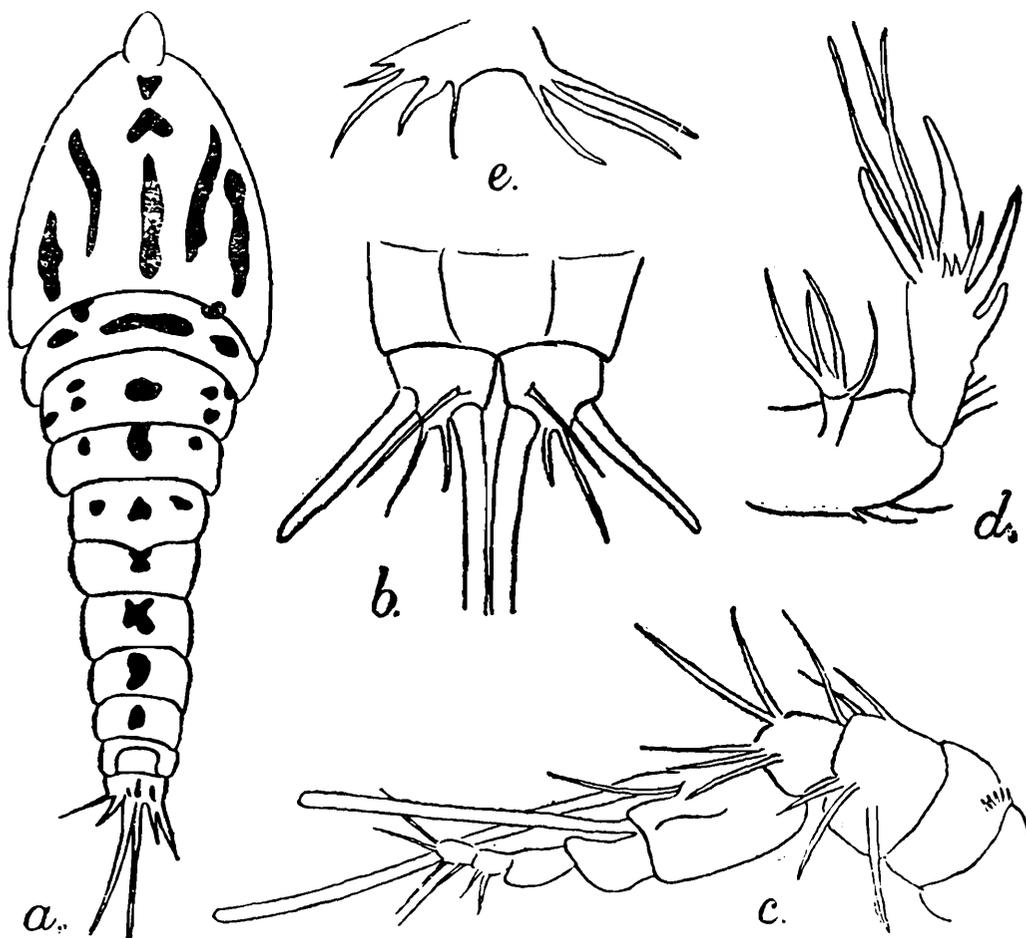
By S. KRISHNASWAMY, Zoology Laboratory, Madras University.

In a tow-net collection made on 22nd March 1949 (night collection) in Kundugal Channel, three males belonging to the genus *Eudactylopus* were found. These specimens differ from all the other known species of the genus and are hence described here as a new species. The holotype is lodged in the Indian Museum at Calcutta. (ZSI. Reg. No. C2979/1).

*Size*.—Male 0.739 mm. (Excluding the caudal setae) (Text fig. 1a).

*Colour*.—The dorsal side is marked with deep blue lines as in *E. striatus* and *E. fasciatus* Sewell.

*Body*.—The cephalosome is longer than broad. The rostrum is very prominent and mobile. The thoracic segments decrease in breadth gradually. The abdomen is five jointed. The furcal rami are broader than long and each ramus carries a long inner seta, three short slender setae and a spine towards the outer side (Text-fig. 1b). The inner seta is nearly as long as the whole animal.



TEXT-FIG 1.—*Eudactylopus krusadensis* sp. a. a. Dorsal view ♂ (×120); b. Furcal rami (×100); c. Antennule (×400); d. Antenna (×400); e. Maxilla<sub>1</sub> (×600).

*Appendages.*—The antennule is nine jointed and the joints have

1. 2. 3. 4. 5. 6. 7. 8. 9.

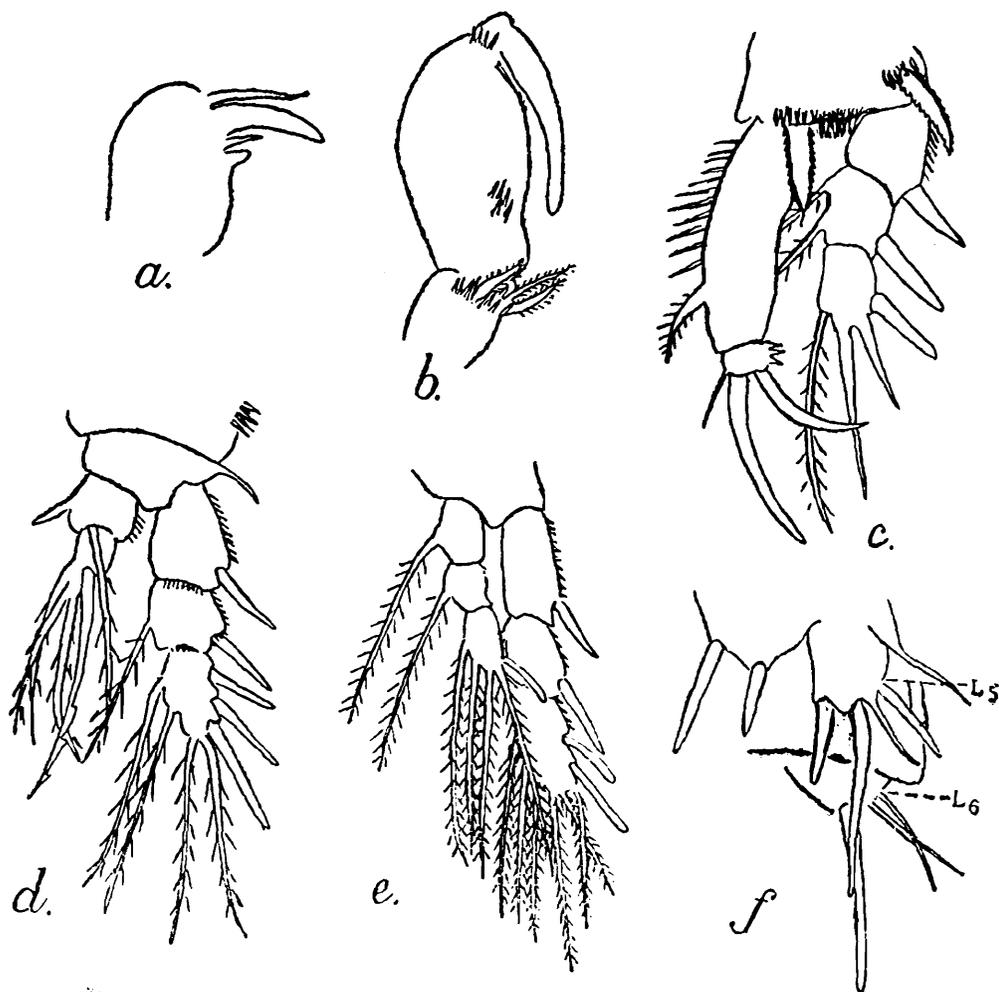
the following proportionate lengths

6. 7. 11. 7. 16. 8. 7. 3. 3.

The fifth segment carries two 'aesthetes' The number of setae and their arrangements are shown in the figure (Text-fig. 1c). The 'hinge' lies between the sixth and the seventh joint. The *antenna* is biramous. The endopod is two jointed and the first joint carries a seta and the second joint three setae. The exopod is single jointed. The outer margin carries a number of spinules, two stout spines, and a seta. There are two stout apical spines and three setae (Text-fig. 1d). The *Mandible* as in other members of the genus. The first maxilla as shown in the figure (Text-fig. 1e). The *second maxilla* consists of a triangular, broad plate with one stout claw and two setae on the inner side (Fig. 2 a). The *Maxilliped* is two-jointed and prehensile. The basal joint carries three plumose spines on the inner distal corner. The second joint is very swollen and is hinged to a stout claw at the apex. There is a small seta at the base of the claw. The inner margin of the second joint carries a number of spinules (Text-fig. 2b). The *first swimming feet* is biramous. The basipod carries two stout spines one towards the outer and one towards the inner side. The exopodite is three jointed. The first joint has its outer margin hirsute and carries a stout spine, the second joint carries an outer spine and two slender setae on the inner side. The terminal joint has two lateral and two apical spines. The endopodite is two jointed. The first joint is very long and has a short plumose spine on its inner side about its distal margin and is armed with spinules. The second joint carries one slender seta, two stout claw-like spines at the apex and has its outer margin spinulated (Text-fig. 2c). The basipodite of the *second swimming feet* has a spine on the outer side. The exopodite is three jointed. The first joint carries an outer lateral spine, the second joint one outer lateral spine and an inner seta and the terminal joint three outer lateral spines and four inner setae. The outer margin of first and second joints are armed with fine teeth. The endopodite is three jointed. The first joint carries teeth on the outer side and a short spine on the inner side. The second joint carries a long seta and the third joint three long setae and a specialised seta armed with spinules (Text-fig. 2d). The exopodite as well as the endopodite of the *third swimming feet* are 3-jointed. The first exopod joint carries one outer lateral spine, the second joint one outer lateral spine and an inner seta and the terminal joint three outer spines and five inner setae. The first and second endopod joints carry an inner seta each and the terminal one outer spine, two outer and three inner setae (Text-fig. 2e). The *fourth swimming feet* resembles the third one. The *fifth leg* consists of a basal expansion tipped with two stout spines on the inner side and a slender seta on the outer side and an inner joint with three spines and a seta (Text-fig. 2 L5). The sixth leg is represented by a long stout spine and two setae on the outer side (Text-fig. 2 L6).

*Remarks.*—The genus *Eudactylopus* contains the following eight species, *E. robustus* (Claus), *E. latipes* (T. Scott), *E. opima* (Brian),

*E. spectabilis* (Brian), *E. striatus*, *E. fasciatus*, *E. anomala* Sewell and *E. australis* Nicholls. The present form closely resembles *E. striatus* and *E. fasciatus* Sewell, but differs from them both in size in the structure of the endopod of the antenna and the first leg. The structure of the fifth leg also differs from these known species.



TEXT-FIG. 2.—*Eudactylopus krusadensis* n. sp. a. Maxilla<sub>2</sub> (×600); b. Maxillipede (×600); c. First swimming feet (×400); d. Second Swimming feet (×400); e. Third swimming feet (×400); f. Fifth (L5) and sixth (L6) legs (×600).

*Eudactylopus krusadensis* can be defined as follows: Length 0.739 mm. The dorsal side of the animal with striations. The antennule is nine jointed, the 'hinge' lying between the sixth and the seventh joint. Endopod of antenna with four stout spines and four setae. The endopod carries a number of spinules also. Endopod of first leg two jointed. First joint armed with spines on the inner margin. There is a stout seta also on the inner margin. The terminal joint with two stout claw-like spines and a seta. The basal expansion of the fifth leg tipped with two spines on the inner side. The second joint with three stout spines and a seta. Sixth leg represented by a long, stout, spine and two setae.

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