

- SHOUP, J. B., 1968. Shell opening by crabs of the genus *Calappa*. Science, New York, **160**: 887-888.
- WEST, D. A., 1976. Aposematic coloration and mutualism in sponge-dwelling tropical zoanths. In: G. O. MACKIE, ed., *Coelenterate Ecology and Behavior*: 443-452. (Plenum Press, New York).

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## AN INDIAN OCEAN RECORD FOR *SADAYOSHIA ACROPORAE* BABA (DECAPODA, ANOMURA)

BY

NASIMA M. TIRMIZI

Invertebrate Reference Museum, University of Karachi, Karachi, Pakistan

The genus *Sadayoshia* Baba, 1969 of the family Galatheididae contains five species, all Indo-Pacific. Only one, *S. edwardsi* (Miers), was previously recorded from the Indian Ocean. Three male specimens, obtained by the International Indian Ocean Expedition (IIOE) 1963-1964, provide a new Indian Ocean record for *Sadayoshia acroporae* Baba known only from the type locality: Ryukyu Islands (Baba, 1972: 43). The specimens at hand agree well with the holotype except in some details which are noted in the following account.

### *Sadayoshia acroporae* Baba, 1972

Sta. AB 29, Anton Bruun Cruise 1; 11°23'N 93°31'E, 80 m, 28 March 1963; 1 ♂.

Sta. 363 P, Anton Bruun Cruise 7; 23°17'S 43°33'E, 1225 m, 6 August 1964 2 ♂♂ (one badly mutilated and therefore not included in the detailed study).

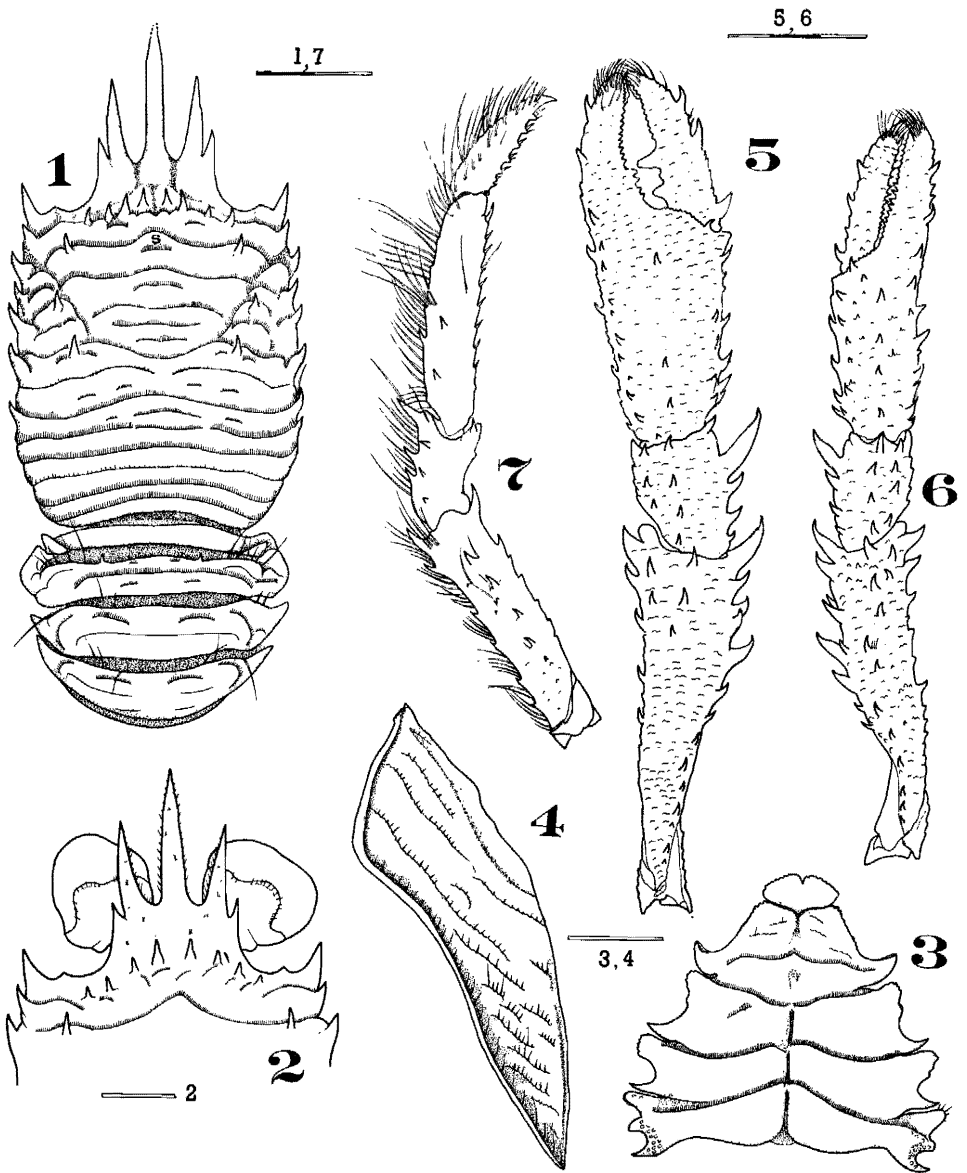
Measurements (in mm; of the male from Sta. AB 29 and the least damaged male from Sta. 363 P, respectively). — Carapace length (including rostrum, but extreme tip broken), 10, 9; carapace breadth, 6, 5.5; length of cheliped, 20 (left), 19 (right), - , - (broken in the second specimen but at least 12 mm long).

The material will be deposited in the National Museum of Natural History, Smithsonian Institution, Washington, D.C.

The rostrum and the supraorbital spines are without scales in the larger specimen from Sta. AB 29 (fig. 1); with a few scattered ones in the smaller specimen from Sta. 363 P (fig. 2). The outer orbital angle is rather acute. The carapace, excluding the rostrum, is either as long as or slightly longer than wide.

A small additional stria (fig. 1, s) is present behind the second stria of the carapace, in the larger specimen. In the smaller specimen the number of striae in front of the cervical groove is reduced. There are only three striae behind the additional stria. Only one or two coarse setae are present on the dorsal surface of the carapace. In the larger specimen there is an additional marginal tooth on the right side, as illustrated.

The third maxilliped has the inner terminal tooth of the ischium poorly devel-



Figs. 1-7. *Sadayosbia acroporae* Baba, 1, 3-7, male (c.l. + r = 10 mm), Sta. AB 29; 2, male (c.l. + r = 9 mm), Sta. 363 P. 1, male in dorsal view; 2, anterior part of carapace and eyes; 3, sternal segments; 4, left pterygostomial flap; 5, left cheliped, dorsal view; 6, right cheliped, dorsal view; 7, detached walking leg; s, additional stria. Scales in mm.

oped; the inner toothed ridge has a larger number of teeth, there being 32 to 35, varying even on the two sides of the same individual.

The second abdominal segment shows broken striae in front of and behind the deep median transverse groove. The third segment lacks the broken striae behind the groove. In the smaller specimen the broken striae in front of the groove on the second segment and behind the groove in the third are wanting.

The sternite of the third thoracic somite in the smaller specimen is as described for the holotype but in the larger one it is finely serrated (fig. 3), not divided into blunt teeth; a median notch, however, is present in both.

The pterygostomial flap is wing-shaped with grooves and striae (fig. 4).

The chelipeds are present only in the specimen from Sta. AB 29; the left cheliped is slightly the larger. The armature of the cheliped is, more or less, the same as in Baba's specimen except that a median row of spines is present on the dorsal surface of the palm (figs. 5, 6).

The walking legs (fig. 7) are all detached, two with the larger specimen and twelve in the jar containing the two specimens from Sta. 363 P. The spines on the anterior margin of the merus vary in number from 5 to 9; the posterior marginal spines of the propodus numbering from 8 to 10, mostly 9; there are 6 to 8 bristles on the posterior margin of the dactylus.

The male pleopods are essentially the same as described for the holotype.

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#### REFERENCES CITED

- BABA, K., 1969. Four new genera with their representatives and six new species of the Galatheidae in the collection of the Zoological Laboratory, Kyushu University, with redefinition of the genus *Galathea*. Ohmu, Occ. Pap. Zool. Lab. Fac. Agr. Kyushu Univ., 2 (1): 1-32.
- , 1972. A new species of the galatheidean Crustacea from the Ryukyu Islands (Decapoda, Anomura). Mem. Fac. Educ. Kumamoto Univ., Nat. Sci., 20 (1): 43-48, text-figs. 1, 2.
- MIERS, J. E., 1884. Crustacea. Report on the zoological collections made in the Indo-Pacific Ocean during the voyage of H.M.S. "Alert" 1881-2: 178-322, 513-575, pls. 18-34, 46-52.

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