

MITHRAX (*MITHRAX*) *PLEURACANTHUS* STIMPSON, 1871, A
NEW DECAPOD FOR THE BRAZILIAN FAUNALILLIANA FORNERIS
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ABSTRACT

Mithrax (*M.*) *pleuracanthus* Stimpson, 1871, was collected in the upper sublittoral on both sides of the São Sebastião Channel (23°48'S, 45°23'W). The geographical distribution, ecological notes and main morphological characters of the species are given.

The genus *Mithrax*, containing thirty-one determined species, has an amphi-American distribution (Ekman, 1953:32, fig. 7). For the Western Atlantic coast twenty species of *Mithrax* are mentioned, and up to date ten species have been found on the Brazilian coast, seven belonging to the subgenus *Mithrax* and three to the subgenus *Mithraculus*. The greatest percentage of species occurs on the northeastern coast (Coelho, 1971; Coelho & Ramos, 1972), the area most studied.

Only two species are mentioned occurring south of Rio de Janeiro: *Mithrax* (*Mithrax*) *hispidus* (Herbst, 1790) (Ubatuba and São Sebastião) (Luederwaldt, 1919:432) and *Mithrax* (*Mithraculus*) *coryphe* (Herbst, 1785) (Vitória Island, São Paulo) (Rathbun, 1925:428).

Observations on the species *Mithrax* (*Mithrax*) *pleuracanthus* Stimpson, 1871, collected in São Sebastião were made during a study of chemical defense behaviour of brachyuran crustaceans (Freitas, 1980). This was the first occurrence of the species in Brazil.

Six adult males and juvenile females were collected at a depth of between 4 and 12 m by Scuba diving. The large male measured 45 mm length and 61 mm width; the juvenile female, 20 mm length and 25 mm width.

The specimens studied agree with the description of *M. pleuracanthus* given by Rathbun (1925:411). The main characteristics of the species (Fig. 1) are the four lateral carapace protuberances, the last being spiniform and the others tuberculated.

The transverse row of five tubercles in the gastric region mentioned by Williams (1965:254) in his key to species of the Carolinas, to separate *M. pleuracanthus* from *M. hispidus*, is conspicuous in juvenile specimens of both species. In the adult stage, this row is not easily distinguished.

The first pleopod in the male has the usual shape, but the truncated apex (Fig. 2) does not conform to the figure given by Williams (1965:625, fig. 275 D). However, this difference may be due to the age of the specimens (Garth, 1958:12).

Distribution — Beaufort, North Carolina to Gulf of Mexico and the Caribbean Sea: Bahamas, Curaçao (Garth, 1978:311). São Sebastião Island and the littoral of São Sebastião, State of São Paulo, Brazil.

Ecological notes — The species occurs in shallow waters to a depth of about 50 m (Garth, 1978).

Temperature: 11.7°C to 23.5°C. Bottom: on seagrass, sand, rocks, coral, gravel, and rarely in mud (Rathbun, 1925:412-417); on coral reefs formed by the species *Oculina arbuscula* Verrill (Goy *et al.*, 1981); inside sponges (Pearse, 1934 in Williams).

Ovigerous females have been reported from North Carolina in April, from Florida in December, January, February, and August; from Tortugas in De-

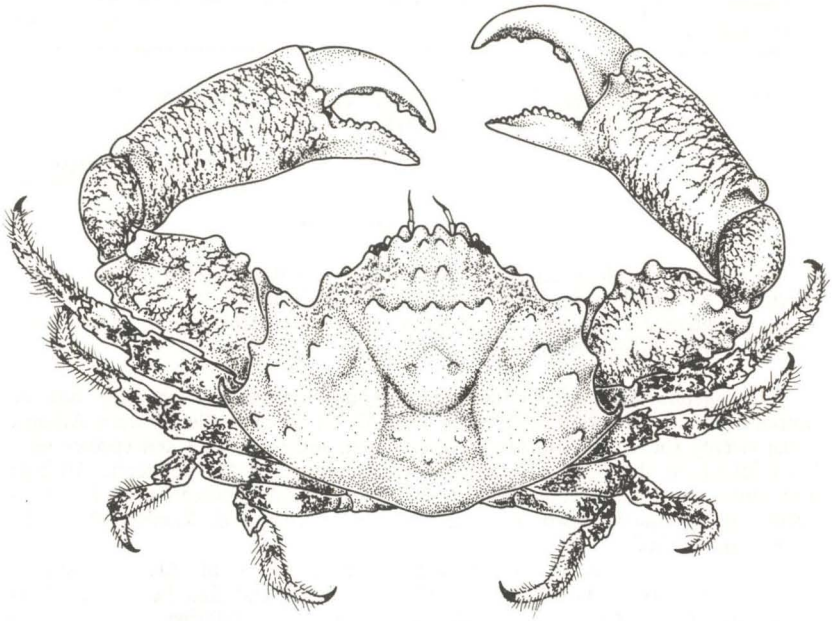


Fig. 1 — *Mithrax (Mithrax) pleuracanthus* Stimpson. Male in dorsal view. Size: 4.2 cm x 5.6 cm.

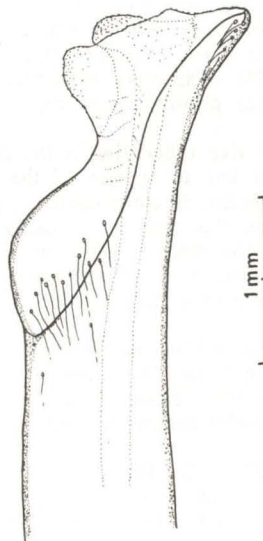


Fig. 2 — *Mithrax (Mithrax) pleuracanthus* Stimpson. Apex of right first pleopod of a 4.2 cm male.

ember; from St. Thomas area in July, and from Venezuela in September (Rathbun; Williams).

The dorsal surface of the carapace, the antero-lateral margins of the same, and the pereopods of some specimens were covered by serpulids, oyster, barnacles, and bryozoans.

Mithrax pleuracanthus lives associated with *M. (Mithraculus) forceps* (A. Milne Edwards, 1875) North Carolina (Williams, 1965) and with *M. hispidus* in São Sebastião.

It was found in the upper sublittoral under stones embedded in sand. The crabs grasp the underside of the stones with the pointed dactylus, an adaptation to exposed environments. This behaviour was also observed in *M. hispidus*, which lies hidden under rocks in shallow water.

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