

## A new species of the genus *Paralomis* (Crustacea, Decapoda, Anomura, Lithodidae) from the Indian Ocean

ENRIQUE MACPHERSON

Instituto de Ciencias del Mar. Paseo Nacional, s/n. 08003 Barcelona. Spain.

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**SUMMARY:** A new species of the genus *Paralomis* from the Indian Ocean (Arabian Sea) is described and illustrated. The species is closely related to *P. investigatoris* Alcock & Anderson, 1899 from the Travancore coast. This is the sixth species of the genus to be recorded from the Indian Ocean.

**Key words:** *Paralomis*, Lithodidae, Crustacea Decapoda, New Species, Indian Ocean.

**RESUMEN:** ESPECIE NUEVA DEL GÉNERO *Paralomis* (CRUSTACEA, DECAPODA, ANOMURA, LITHODIDAE) DEL OCEANO ÍNDICO. — Se describe una nueva especie del género *Paralomis* en el océano Índico (Mar de Arabia). Está caracterizada por la presencia de numerosos y prominentes gránulos en el caparazón, abdomen y pereiópodos. La especie más próxima es *P. investigatoris* Alcock & Anderson, 1899 de las costas de Travancore. Esta es la sexta especie del género *Paralomis* citada en el océano Índico.

**Palabras clave:** *Paralomis*, Lithodidae, Crustacea Decapoda, nueva especie, Océano Índico.

### INTRODUCTION

During the John Murray expedition in 1933 to the Indian Ocean, a single specimen of an unusual lithodid crab was taken. Through the courtesy of Dr. M. Türkay (Senckenberg Museum, Frankfurt), actually in charge of the identification of part of the specimens of the anomuran and brachyuran decapods, and the colleagues at the British Museum (Natural History), this specimen has been studied.

The type specimen is deposited in the British Museum (Natural History), London. Measurements given refer to the length of the carapace, excluding the rostrum (LC), and the maximum width of the carapace (MW).

### *Paralomis ceres* sp. nov.

(Fig. 1 and 2)

**Holotype.** ♂, LC = 52 mm, MW = 57 mm. John Murray Expedition, St. 58, 5 November 1933, 22°22'12"N-59°57'30"E, Dredge, 1189-1354 m.

### Description

Carapace more or less pentagonal in shape, slightly wider than long. Thickly covered with rounded prominent granules of different sizes. Granules bearing thin setae. Regions well defined, slightly convex. Gastric region somewhat more prominent than cardiac and branchial regions. Cardiac area tri-

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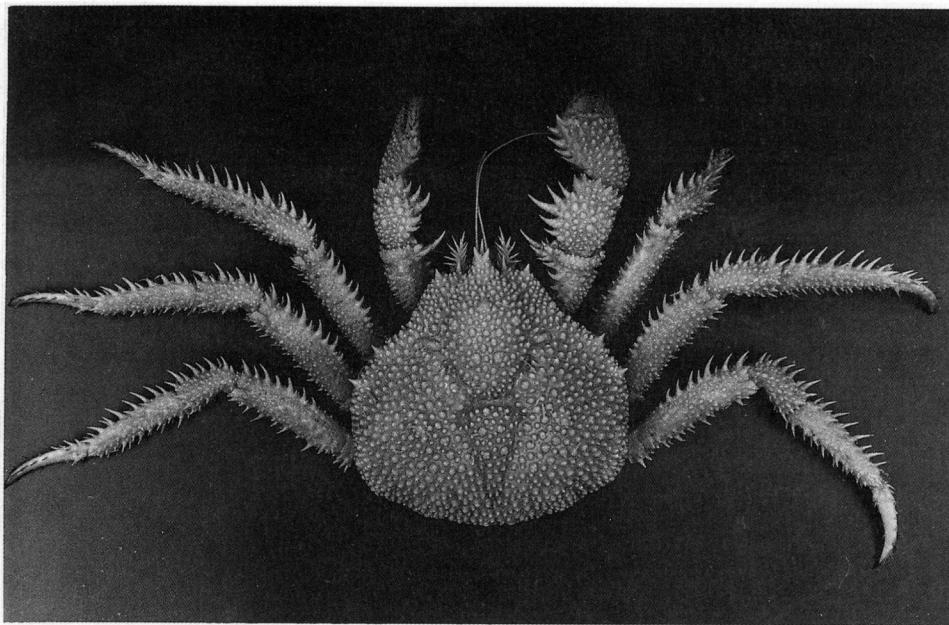


FIG. 1 — *Paralomis ceres* sp. nov., holotype. Dorsal view.

angular, separated from gastric region by deep transverse furrow. A small clearly differentiated prominence on center of anterior half of gastric region and on center of each branchial region. Pterygostomian region with a spine on terminal angle.

Rostrum forwardly produced into a long central spine, weakly curved and slightly raised, bearing dorsolaterally at its base a pair of spines, slightly divergent and upwards, shorter than central spine. Underside of central spine bearing several tubercles.

External orbital spine long, not overreaching eyes, and clearly shorter than central spine. Anterolateral spine smaller than external orbital spine. Two spines, similar in size at anterolateral spine, on anterior branchial margin. Rest of carapace bearing granules.

Abdominal segments covered with rounded, prominent granules. Marginal plates on third segment differentiated from the lateral plates. Marginal plates on third segment differentiated from lateral plates. Marginal plates on third, fourth and fifth segments subdivided.

Ocular peduncles with some spiniform granules dorsally. Basal segment of antennal peduncle has 1 small spine on outer border. Second segment bears 1 long spine reaching end of penultimate segment and several granules and spines on outer and inner borders. Antennal acicle has 1 long terminal spine, clearly overreaching end of central rostral spine, 4 or

5 long spines on outer border. Inner border with 5 long spines, smaller than outer spines.

Chelipeds subequal in length, right cheliped stouter than left, covered with rounded prominent granules. Merus armed with several spines, larger on dorsal margin. Carpus bearing 5 large spines and 3 or 4 small spines on dorsal border. Propodal palm with rows of spines on dorsal side. Tufts of hairs on dactylus and propodal extension.

Walking legs elongate, dorsally covered with rounded prominent granules. Second pair (P3) of ambulatory legs slightly longer than first (P2) and third pairs (P4). Latter 1.5 times length of carapace.

Third pair of walking legs with the basis-ischium armed with several spines on the posterior border. Merus about 2 times as long as carpus and 2.7 times as long as broad, with a row of 7 large spines and several small ones on anterior margin; dorsal side carries many prominent granules, without spines; posterior margin with rows, more or less defined, of spines smaller than anterior ones. Carpus armed with 7 large spines and several small ones on anterior border; several spines on dorsal terminal border. Propodus 2.4 times as long as broad and 0.8 times length of merus, with rows, more or less defined, of spines on anterior and posterior borders. Dactylus as long as propodus, with small spines on proximal portion; a row of corneae spinules on posterior margin; several tufts of hairs on anterior border.

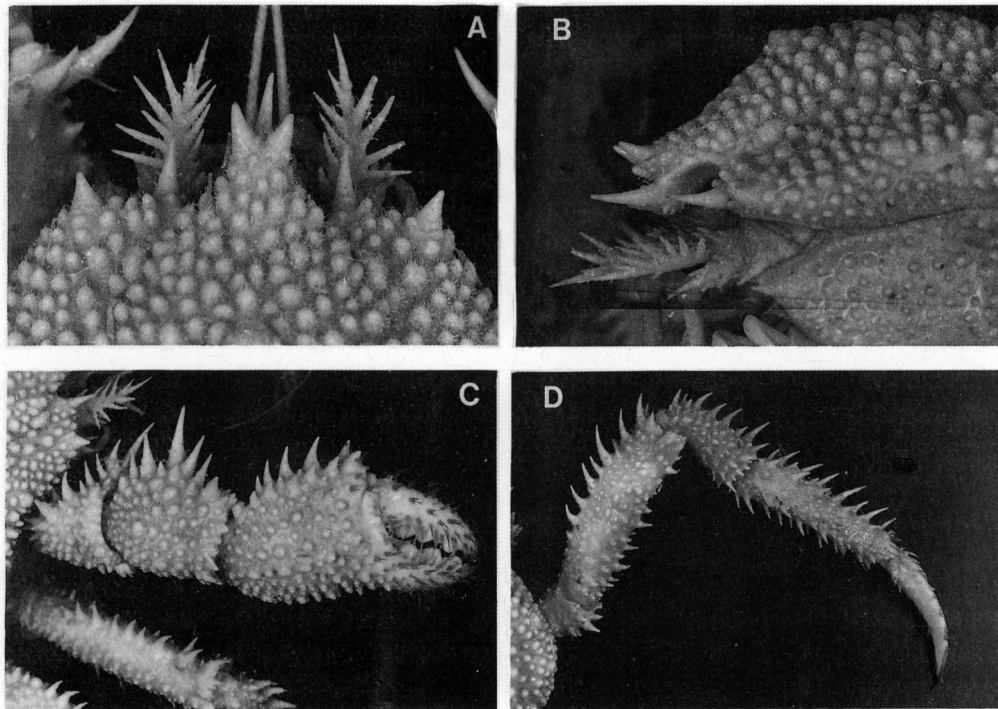


FIG. 2. — *Paralomis ceres* sp. nov., holotype. A. — Acicle and anterior part of the carapace, dorsal view. B. — Anterior part of the carapace, lateral view. C. — Right cheliped. D. — Third right ambulatory leg.

### Etymology

The name *ceres* (Roman goddess of grains and agriculture) refers to the numerous granules covering the carapace and pereopods.

### Remarks

Among the species of the genus *Paralomis* (MACPHERSON, 1988 a, b), *P. investigatoris* Alcock & Anderson, 1899 from the Travancore coast is the closest relative to the new species. This resemblance lies mainly in the ornamentation of the dorsal surface of the carapace covered by prominent granules. From the description and illustrations provided by ALCOCK & ANDERSON (1899 a, b), ALCOCK (1901) and the photos of the type specimens kindly supply by Dr. M. Deb (Zoological Survey of India) the species differ in the following aspects:

- Lateral margins of the carapace with many spines of different sizes in *P. investigatoris*, whereas in *P. ceres* there are only two spines on each anterior branchial border.
- Walking legs with more prominent granules in *P. ceres*. On the other hand, the dorsal side of the merus of the third pair of walking legs carries several spines in *P. investigatoris*. These spines are absent in the new species.

No other known species of *Paralomis* from the Indian Ocean (*P. indica* Alcock & Anderson, 1899, *P. aculeata* Henderson, 1888, *P. roeleveldae* Kensley, 1981 and *P. stella* Macpherson, 1988) exhibits the peculiar armature of the carapace, abdomen and pereopods.

*P. aculeata* is easily distinguishable by the carapace covered with spiniform tubercles, with true spines on the anterior part of the gastric region and near the carapace edges.

*P. indica*, *P. roeleveldae* and *P. stella*, among other characters, may immediately be distinguished by the presence of numerous spines on the lateral margins of the carapace (see also KENSLEY, 1981 and MACPHERSON, 1988b).

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