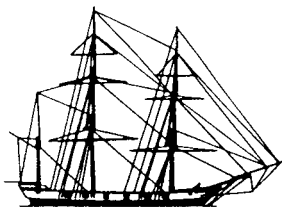

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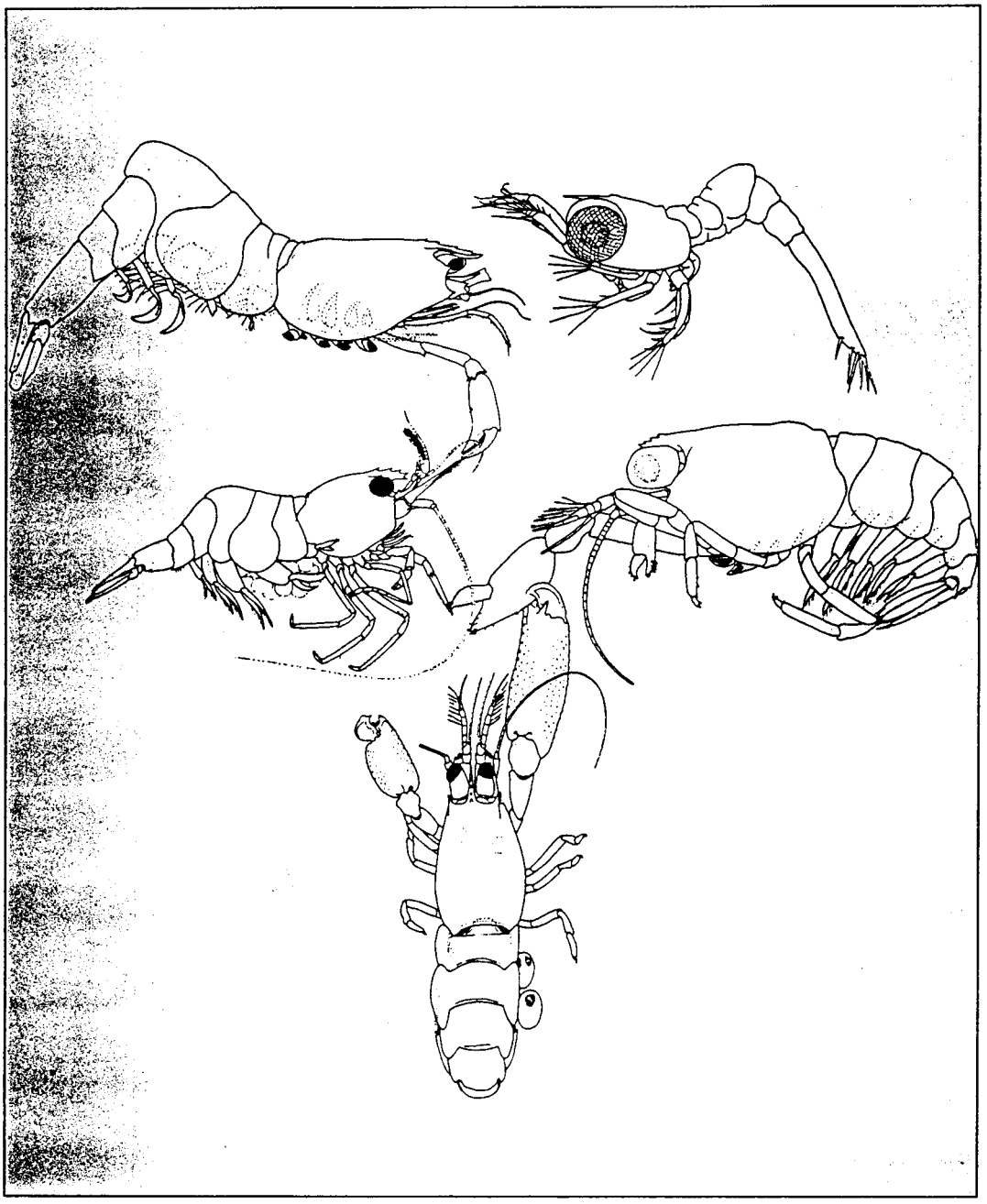

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A NEW GENUS OF DEEP-SEA MAJID CRAB : *GRIFFINIA* GEN. NOV. (CRUSTACEA, DECAPODA, BRACHYURA).

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ABSTRACT

A new record from north-western Australia permits the description of the first male of *Griffinia lappacea* (Rathbun, 1918) comb. nov. The morphological features and the shape of the first pleopod merit the creation of a new genus for this deep sea species: *Griffinia* gen. nov. This new genus includes two other Pacific species, *G. gilloloensis* (Rathbun, 1916) and *G. polita* (Griffin and Tranter, 1986).

KEYWORDS: Crustacea, Decapoda, Brachyura, Majidae, *Griffinia*, new genus, deep-sea.

INTRODUCTION

In 1990, I found among the deep-sea material preserved in the Northern Territory Museum, three specimens of majid crabs from north-western Australia belonging to *Antilibinia lappacea* Rathbun, 1918. This species is very rare and not well known. Rathbun (1918) described it from a single female specimen from the Great Australian Bight. Barnard (1950), commenting on the South African species *Antilibinia smithii* MacLeay, 1838, remarks that *A. lappacea*: "does not seem ... to fit well into this genus".

In their preliminary work, listing the very rich material collected by the MUSORSTOM 1 cruise in the Philippine Islands (Forest, 1981), Serène and Vadon (1981) mentioned one female specimen of a "*Pisidarum* sp". These authors considered it to be an unknown species belonging to a new genus. The name *Pisidarum* means only "genus belonging to Pisidae" (D. Guinot *in litt.*).

Griffin and Tranter (1986) found another female specimen from Kai Islands (Indonesia) and remarked that it looked very similar to the *Pisidarum* sp. of Serène and Vadon. In the remarks about the affinities of their new species *A. polita*, Griffin and Tranter noted that "a new genus may be required for the western Pacific species".

After having examined the holotype and the first known male of *Antilibinia lappacea*, I think that the specimen from north-western Australia and the holotype belong to the same species (which does not belong to the genus *Antilibinia*). The holotype of *A. gilloloensis* Rathbun, 1916, and a male specimen of *A. smithii* MacLeay, 1838, from South Africa, were also examined. Therefore, it is necessary to separate the Pacific species (*A. lappacea, A. gilloloensis, A. polita)* from the type species *A. smithii*, and create for them a new genus, *Griffinia* gen. nov.

Abbreviations: AM = Australian Museum, Sydney; MNHN = Muséum national d'Histoire naturelle, Paris; NTM = Museums and Art Galleries of the Northern Territory; SAMA = South African Museum, Capetown; USNM = National Museum of Natural History, Washington. Measurements are in mm; the lengths are without rostrum.

Super-family Majoidea Samouelle, 1819
Family Majidae Samouelle, 1819
Sub-family Epialtinae MacLeay, 1838
Griffinia gen. nov.

Antilibinia - Rathbun 1918: 12; Hale 1927: 133; Griffin 1966: 267; Griffin and Tranter 1986: 70 (*pro-parte*: only *A. lappacea*).

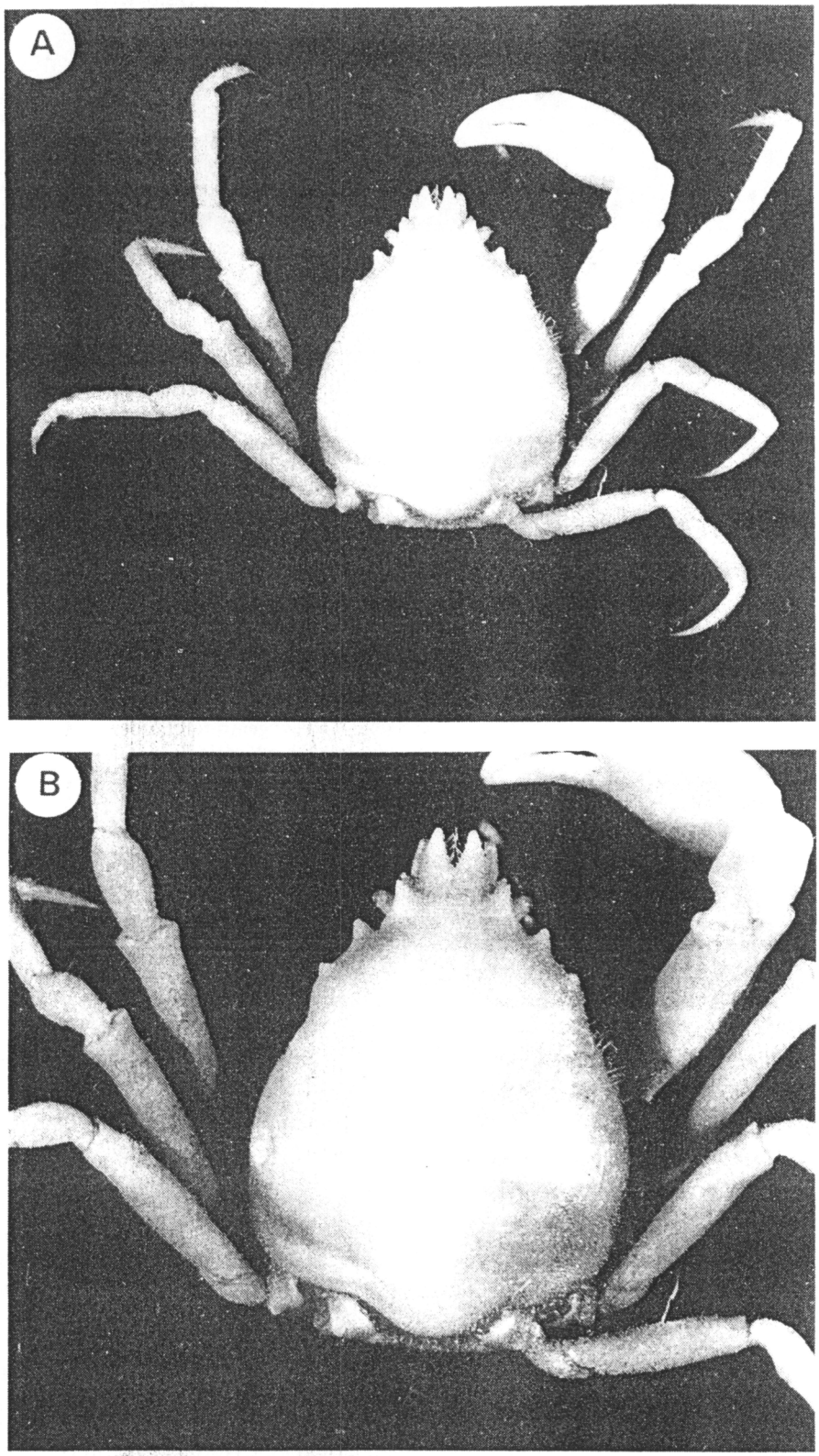

Fig. 1. *Griffinia gilloloensis* (Rathbun, 1916) comb. nov., male holotype 13.1 x 10 mm (USNM 48205). **A**, dorsal view; **B**, dorsal view of carapace.

Pisidarum Serène and Vadon, 1981: 128.

nec Antilibinia MacLeay, 1838: 56; Krauss 1843: 49; Stebbing 1910: 287; Stebbing 1918: 49; Rathbun 1916: 537; Barnard 1950: 36; Sakai 1965: 43; Sakai 1976: 201.

Diagnosis. A small species, less than 20 mm. Carapace pyriform, surface smooth, covered by long, thin, spaced hairs; without spines or tubercles. Rostrum composed of two divergent spines. Orbit very open, defined by strong, acute, preocular spine joining a very narrow supraocular eave ending in small, blunt, postocular spine. Basal antennal article longer than broad. Lateral border of the carapace with granules. One hepatic tooth, well developed in *G. lappacea*. Border of the pterygostomian area serrulate. Cheliped merus, carpus and propodus carinate in the male. Short ambulatory legs, cylindrical in cross-section. Abdomen with seven segments in male and six in female (fifth and sixth fused). First pleopod of male thin and straight, distally flattened with an apical opening.

Etymology. Dedicated to Dr. D. J. G. Griffin, who recognized that the genus *Antilibinia* was heterogeneous.

Type species. *Griffinia lappacea* (Rathbun, 1918).

Griffinia gilloloensis (Rathbun, 1916) comb. nov.
(Figs 1A-B, 2A)

Antilibinia gilloloensis Rathbun, 1916: 537; Rathbun 1918: 13; Sakai 1965: 43, fig. 2; Sakai 1976: 201, fig. 109; Griffin and Tranter 1986: 70.

Material Examined. 1 male holotype 13.1 x 10 mm (USNM 48205), Philippines, between Gillolo and Makyam Islands, RV *Albatross*, st. 5624, 0°12'15"N - 127°29'30"E, 535 m, 29 November 1909 (M. J. Rathbun det. *Antilibinia gilloloensis*).

Remarks. *Griffinia gilloloensis* has a short, round shell with long, dispersed setae. The rostral spines are very short, the supraocular spines are short and there is an hepatic tubercle. The pereopods have setae.

The carapace is shorter in *G. gilloloensis* than in *G. lappacea*; the rostral spines and supraocular spines are shorter too. In *G. gilloloensis* there is only an hepatic tubercle but there is a very long, blade-like sub-hepatic spine in *G. lappacea*.

Rathbun (1916) described this species without any illustrations and placed it in the genus *Antilibinia* without discussion. The only previously published figure is in Sakai's (1965, 1976) work on Japanese specimens.

The male first pleopod is straight, thin, with a sharp tip (Fig. 2A).

Distribution. Philippines and Japan.

Griffinia lappacea (Rathbun, 1918) comb. nov.
(Figs 3A-D, 4B-C)

Antilibinia lappacea Rathbun, 1918: 12-14, fig. 3, pl. 7, fig. 3; - Hale 1927: 133-134, fig. 133; Barnard 1950: 37; Griffin 1966b: 267-268; Sakai 1976: 201; Griffin and Tranter 1986: 70.

Pisidarum sp. Serène and Vadon, 1981: 128, pl. IVF.

Material Examined. AUSTRALIA: Great Australian Bight, S of Eucla, 32°S 129°60'E, 366-548 m, 5 April 1913, RV *Endeavour*, ovigerous holotype, 12.8 x 9 mm, AM E.3659; north-western Australia, CSIRO cruise 0184, FRV *Soela*, Stn 44, 16°18.1'S 120°18.7'E, 496-500 m, 5

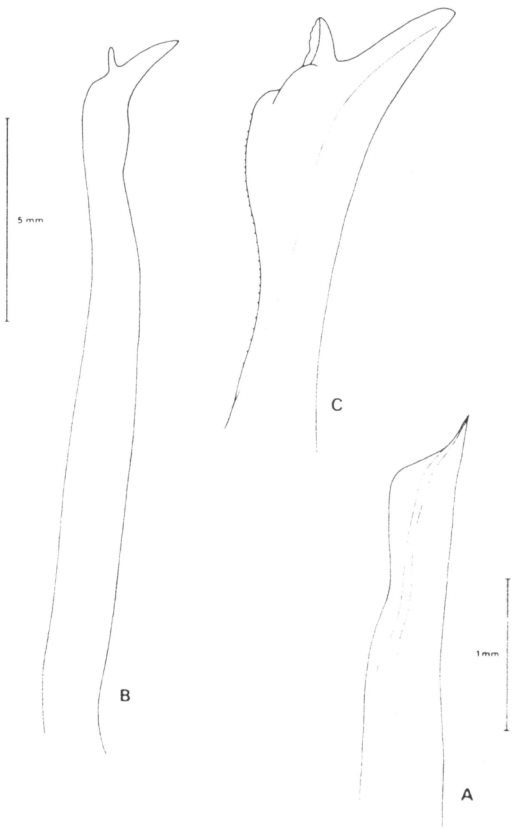

Fig. 2. Male first sexual pleopod. **A**, *Griffinia gilloloensis*; **B, C**, *Antilibinia smithii*.