2.2 INFRAORDER **PALINURIDEA** Latreille, 1802


This infraorder consists of 3 superfamilies: Eryonoidea De Haan, 1841, Glypheoidea Zittel, 1885, and Palinuroidea Latreille, 1802. Only the last of these contains species that are of commercial interest.

**Key to the recent representatives of the three Superfamilies of Palinuridea**

1a. Pereiopods 1 to 4 (or all) with true chelae, the first pair very slender, more than twice as long as the second pair. Eyes immovable, not protruding above surface of carapace, and without pigment. Telson triangular, pointed posteriorly (Fig. 166) .................................................. *Eryonoidea*

1b. Pereiopods 1 to 4 without true chelae, the first pair sometimes with a subchela. Eyes distinct, movable, cornea with pigment. Telson posteriorly broadly rounded (Figs 167, 168).

2a. Epistome large, 1.5 times as long as wide and about 1/3 of carapace length, its posterior margin about level with cervical groove of carapace. Endo- and exopod of the uropod firm throughout; exopod with a diaeresis. Rostrum well developed, reaching to the base of cornea. Eyes inserted on a median elevation of the cephalon, which reaches to about middle of the rostrum, with which it is partly fused. First pereiopods very strong, spiny and subchelate, the second somewhat similar, but smaller and with fewer spines (Fig. 167) ............................................ *Glypheoidea*

2a. Epistome small, wider than long, not reaching much behind level of eyes. Endo- and exopod of the uropods (as well as the telson) soft and flexible in their posterior half, being strongly chitinized only in the basal part. Rostrum usually very small or absent. Eyes not implanted on a median elevation of the cephalon Fig. 168) .................................... *Palinuroidea*
SUPERFAMILY ERYONOIDEA De Haan, 1841


This superfamily consists of four families, three of which contain only fossil species. The fourth, Polychelidae Wood-Mason, 1875, is the only one with recent representatives.

2.2.1 FAMILY POLYCHELIDAE Wood-Mason, 1875

Polychelidae Wood-Mason, 1875, Annals Magazine natural History, (4)15: 132

This family has several genera and numerous species. All species inhabit the deep sea and none are of commercial value. Although some of them attain good sizes, they seem to have relatively little meat and for that reason are of no economic interest. However, some species can be caught in considerable quantities. During the 1964 cruises of R.V. JOHN ELLIOT PILLSBURY the catch of *Stereomastis sculpta talismani* (Bouvier, 1917) (Fig. 169), at one of the stations off West Africa, was so large that most of it had to be shoveled overboard.

Notwithstanding all this, none of the numerous (more than 35) species appears ever to have been brought to the fish markets, or sold as food or bait. Therefore this group is not further considered here. The taxonomy of the Polychelidae, especially of the generic level, is still very unsettled.

SUPERFAMILY GLYPHEOIDEA Zittel, 1885

Glyphaeidae Zittel, 1885, Handbuch der Paläontologie, 1(2):689

This superfamily has three families, two of which are exclusively fossil. The third, Glyphaeidae Zittel, 1885, next numerous fossil taxa, contains a single recent genus with a single species.

Zittel (1885) cited Winkler (1881:73) as the author of the name Glyphaeidae. However, Winkler (1881) although dealing extensively with the genus *Glyphea* did not establish a family name based on this generic name, he at most used the expression “les glyphees”. Zittel (1885) therefore must be considered the author of the family name; Zittel used the incorrect spelling *Glyphaea* and Glyphaeidae for the genus and family, respectively.

2.2.2 FAMILY GLYPHEIDAE Zittel, 1885

Glyphaeidae Zittel, 1885, Handbuch der Paläontologie, 1(2):689.

The only recent genus is the following:
Neoglyphea Forest & De Saint Laurent, 1975


Type Species: by original designation (gen.nov., sp.nov.) and monotypy: Neoglyphea inopinata Forest & De Saint Laurent, 1975.

A single species.

Neoglyphea inopinata Forest & De Saint Laurent, 1975


FAO Names: En - Fenix lobster.

Type : Type locality: "Albatross, Station 5278 ... 14º00'10"Nord; 120º17'15"Est; 185 m", south west of entrance of Manila Bay, Philippines. Holotype male, in USNM, no. 152650.

Geographical Distribution : Indo-West Pacific region. The species is known only from 14 specimens all trawled south west of the entrance of Manila Bay in a small area between 13º59.0'- 14º08.0'N and 120º15.8'-120º20.5'E, 186-189 m, and from 3 specimens taken in the Timor Sea, 9º46'S 130º00'E, 240-300 m (Fig. 171).

Habitat and Biology : Depth range from 186 to 300 m; firm substrate with mud

Size : Total body length between 7 and 14.9 cm, carapace length between 3 and 6.7 cm.

Interest to Fisheries : The scarcity of the species (only 17 specimens known) and its probably very restricted range, do not make it a likely subject for a fishery.