

2.2.4

FAMILY SYNAXIDAE Bate, 1881

SYNTAX

Synaxidae Bate, March 1881, *Annals Magazine Natural History*, (5)7:228.

Type Genus: *Synaxes* Bate, March 1881.

Synonyms : *Araeosternidae* De Man, July 1881, *Notes Leyden Museum*, 3: 137.

Type Genus: *Araeosternus* De Man, July 1881.

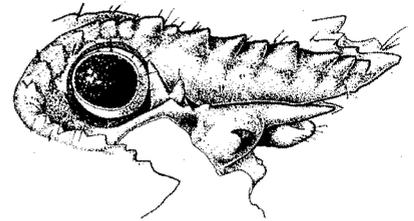
This family consists of two genera and a total of three species.

Key to Genera :

1a. Antennular plate with stridulating organ (Fig. 309a). Rostrum transversely oval, wider than long. Lateral margin of carapace with distinct teeth behind anterolateral tooth (Fig. 309b). Posterior margin of pleura of abdominal somites 2 to 5 with a deep and abrupt excavation near the top, most distinct in somites 4 and 5. Total length to 27 cm **Palibythus**

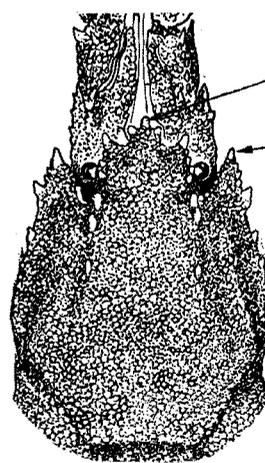


a. lateral view of orbital region and antennular plate
(from Davie, 1990)



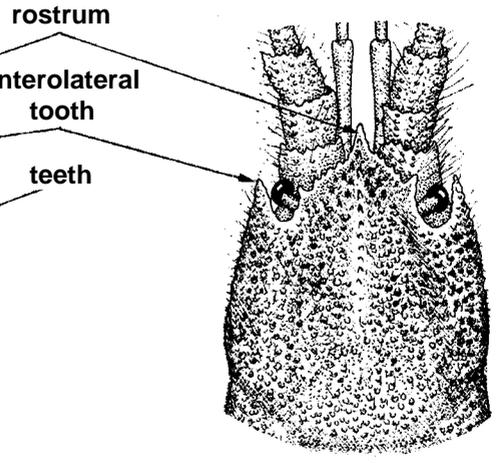
a. lateral view of orbital region and antennular plate
(from Davie, 1990)

1b. Antennular plate without stridulating organ (Fig. 310a). Rostrum triangular, longer than wide. Lateral margin of carapace without teeth behind anterolateral tooth (Fig. 310b). Posterior margin of abdominal pleura evenly sinuously rounded, without a deep and sudden concavity near the top. Maximum known length 20 cm **Palinurellus**



b. anterior part of carapace (dorsal view)
(after Davie, 1990)

Palibythus Fig. 309



b. anterior part of carapace (dorsal view)

Palinurellus Fig. 310

Palibythus Davie, 1990

SYNTAX Palib

Palibythus Davie, 1990, *Invertebrate Taxonomy*, 4:685. Gender masculine.

Type Species : By original designation and monotypy: **Palibythus magnificus** Davie, 1990.

A single species is known of this genus.

Palibythus magnificus Davie, 1990

Fig. 311

SYNTAX Palib 1

Palibythus magnificus Davie, 1990, *Invertebrate Taxonomy*, 4:685,686, figs 1A,B, 3A,C,4A, 5A.

FAO Names : En - Musical furry lobster.

Type : Type locality of **Palibythus magnificus** : "off coast of Savaii, Western Samoa, trapped . . . 220-275 m". Female holotype, QM, no. W 16402, 2 female paratypes, QM, no. w 15941.

Geographical Distribution: Central Pacific: W. Samoa and Tuamotu Archipelago (Fig. 312).

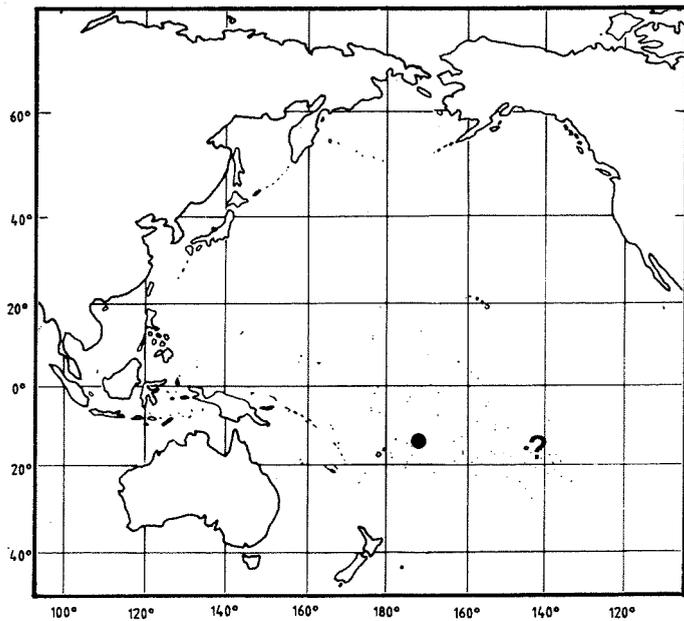


Fig. 312

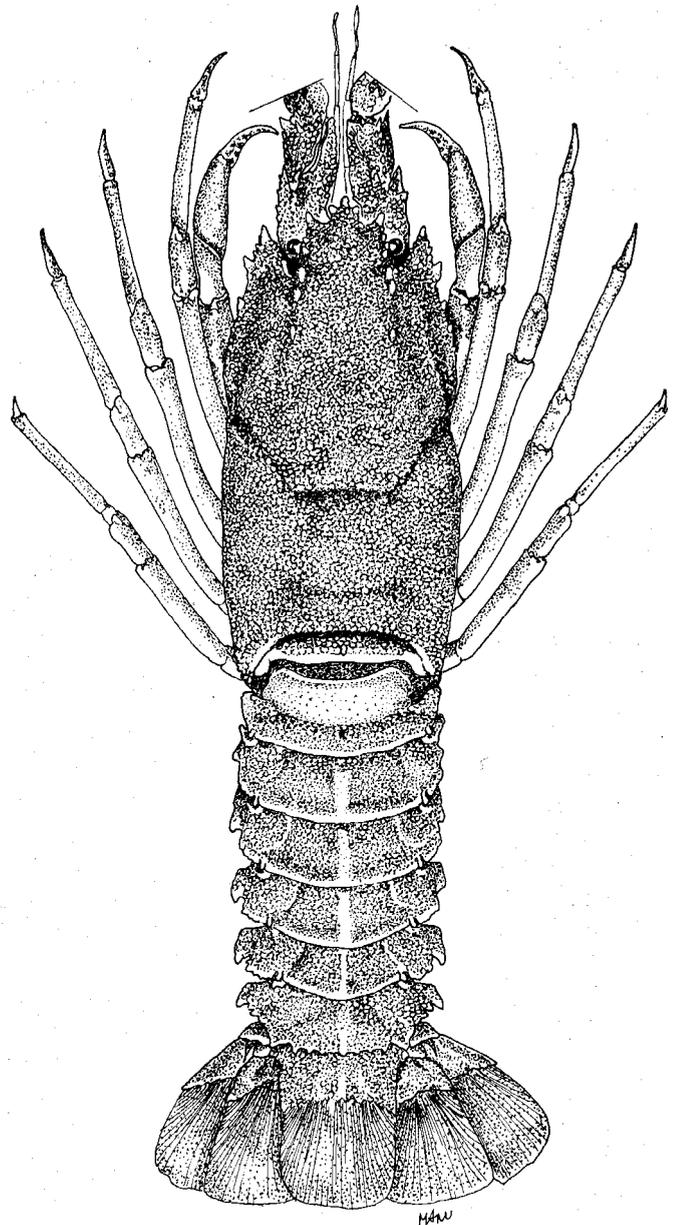
Habitat and Biology : Depth range between 220 and 300 m.

Size : Carapace length in females 13.1 to 13.7 cm, corresponding with a total length of about 27 cm. Males unknown.

Interest to Fisheries : So far none, as the species seems to be very rare and lives in deep water. The three females from Samoa were obtained in a fish trap, evidently during commercial or exploratory fishing.

Literature : Original description.

Remarks: The specimens from the Tuamotu Islands are only known from photographs, but were "almost definitely this species" (Davie, 1990:688).



(after Davie, 1990)

Fig. 311

Palinurellus Von Martens, 1878

SYNTAX Pali

Palinurellus Von Martens, 1878, *Sitzungsberichte Gesellschaft naturforschender Freunde, Berlin*, 1878: 131. Gender masculine. Name placed on the Official List of Generic Names in Zoology, in Opinion 519 (published in 1958).

Type Species: by monotypy: **Palinurellus gundlachi** Von Martens, 1878

Synonyms : ? **Phyllamphion** Reinhardt, 1849, *Videnskabelige Meddelelser naturhistoriske Forening Kobenhavn*, 1849-1850:2. Type species, by monotypy: **Phyllamphion elegans** Reinhardt, 1849. Gender masculine.

Synaxes Bate, 1881 (March), *Annals Magazine Natural History*, (5)7:228. Type species, by monotypy: **Synaxes hybridica** Bate, 1881 (March). Gender feminine.

Araeosternus De Man, 1881 (July), *Notes Leyden Museum*, 3: 137. Type species, by monotypy: **Araeosternus wieneckii** De Man, 1881 (July). Gender masculine.

Two species are recognized in this genus, neither of commercial importance. If **Phyllamphion** is based on larvae of the present genus, which, in the light of recent investigations seems most likely, the generic name **Phyllamphion** is the oldest for the genus and therefore has to replace **Palinurellus**.

The two species are very similar. Some of the alleged differences proved to be due to abnormalities (e.g., the shape of the rostrum in the holotype of **P. wieneckii**), incorrect observations, or incorrect interpretation of the variability of characters. As both species are rather rare the study of larger series of specimens is necessary to clarify their taxonomic status.

Key to Species :

1a. Western Atlantic . . **P. gundlachi** (Fig. 313)

1b. Indo-West Pacific . **P. wieneckii** (Fig. 315)

Palinurellus gundlachi Von Martens, 1878

Fig. 313

SYNTAX Pali 1

Palinurellus gundlachi Van Martens, 1878, *Sitzungsberichte Gesellschaft naturforschender Freunde, Berlin*, 1878: 131. Name placed on the Official List of Specific Names in Zoology, in Opinion 519 (published in 1958).

Synonyms : **Synaxes hybridica** Bate, 1881; ? **Phyllamphion reinhardti** Belloc, 1959.

FAO Names : **En** - Caribbean furry lobster; **Fr** - Cacahouète cara'ïbe; **Sp** - Langostita del Caribe

Type : Type locality of **P. gundlachi**: "an der Küste von Cuba, bei Camaricoia östlich von Matanzas". Holotype female in ZMB no. 5833, in alcohol, condition excellent.

Type locality of **Synaxes hybridica**: "West Indies". Holotype female in NMI, dry but in reasonable condition (don. Sir F.L. McClintok).

Type locality of **Phyllamphion reinhardtii**: "entre la Pointe orientale de la Guadeloupe (Pointe des Châteaux) et le petit archipel situé dans le sud-est connu sous le nom de Petite-Terre". Holotype larva in MOM, at present not located.

Geographical Distribution : Western Atlantic: Bermuda, Bahama islands, southern Florida, Yucatán, Caribbean Arc (Cuba to Barbados), Curaçao, N.E. Brazil (Pernambuco) (Fig. 314).

Habitat and Biology : Depth range from 1.5 to 35 m; found in rather inaccessible places among rock and coral. Rather scarce.

Size : Maximum total length about 1.5 cm.

Interest to Fisheries : Caught by hand, and occasionally in traps, but of no interest to commercial fisheries.

Local Names : MARTINIQUE: Vraie langouste de metropole; USA: Copper lobster (Florida).

Literature : Fischer (ed.), 1978: vol. 6.

Remarks : There appears to be little doubt that the larvae described as **Phyllamphion** belong to the present genus. Should this be confirmed, the correct name of the present species must be **Phyllamphion gundlachi** (Von Martens, 1878).

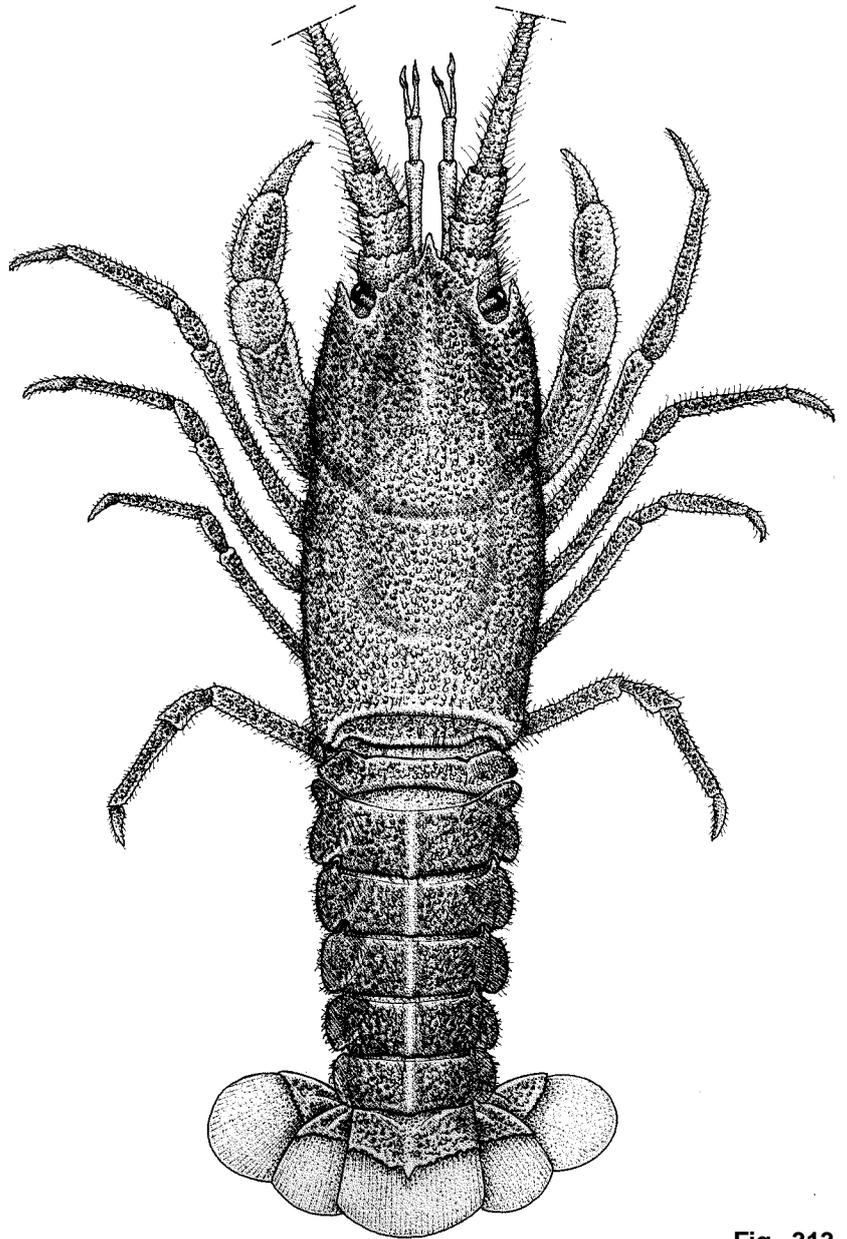


Fig. 313

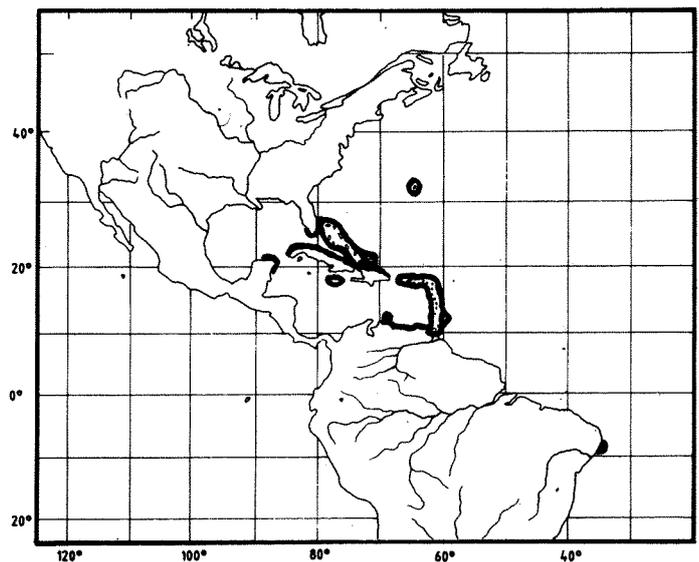


Fig. 314

Palinurellus wieneckii (De Man, 1881)

Fig. 315

SYNTAX Pali 2

Araeosternus wieneckii De Man, 1881, Notes Leyden Museum, 3:131.

Synonyms: ? **Cancer cassideus** Forster, 1782; ? **Phyllamphion elegans** Reinhardt, 1849; **Palinurellus gundlachi wieneckii**. Gruvel, 1911.

FAO Names : **En** - Indo-Pacific furry lobster; **Fr** - Cacahouete indopacifique; **Sp** - Langosta del Indo-Pacífico.

Type : Type locality of **Cancer. cassideus**: "Bewohnt das Indische Meer". "Habitat in Mari Indico" "Zwischen dem Vorgeborge der guten Hoffnung und Indien im grossen Ozean, dreihundert grosse Seemeilen weit von irgend einem Lande". Depository of types unknown.

Type locality of **Phyllamphion elegans**: "har hjemme i det chinesiske Hav, hvor jeg dog kun en Gang har erholdt 3 Exemplarer, som fangedes med Slaebenaettet i nogle Miles Afstand fra Oen Luçon at Par Timer efter Solnedgang (d. 11. Juni 1846)" (has its home in the Chinese Sea, where I once obtained 3 specimens caught with a drag net at several miles off the island of Luzon, a few hours after sunset on 11 June 1846). Depository of syntypes unknown.

Type locality of **Araeosternus wieneckii**: "Rat-Island near Bengkulu (Sumatra)" (= Pulau Tikus, S.W. coast of Sumatra, Indonesia. about 3°50'S 102° 11 'E) Holotype male in RMNH no. D 965

Geographical Distribution: Indo-West Pacific region: Arabian coast of Red Sea, East Africa (larvae), South Africa (Natal, juvenile), western Indian Ocean (larvae), Mauritius, Thailand, (Phuket Island), Japan (Ryukyu Islands), Philippines (larvae), Indonesia (Sumatra, Borneo), New Guinea (Kiriwina Islands), Solomon Islands (Savo Id.), Caroline Islands (Ifaluk), New Caledonia (larvae and juveniles), New Hebrides (larvae), Hawaiian Islands (Oahu, Hawaii, Maui), Tuamotu Islands (larvae and juveniles) (Fig. 316).

Habitat and Biology : In shallow water (from 9 to 27 m) on coral reefs and in marine caves. Probably nocturnal. Larvae planktonic

Size : Maximum total body length about 20 cm, maximum carapace length about 8 cm. Body length usually around 10-14cm.

Interest to Fisheries : Very slight at present: the species is taken only occasionally, being too rare for a commercial Fishery. It is taken by hand and sometimes gets entangled in gill nets. It has caught the attention of the tropical marine aquarium trade, but is too infrequently taken to be of great economic value. The only specimen so far reported from Thailand, was offered for sale in a fancy glass case as a tourist souvenir.

Local Names : HAWAII: Mole lobster; MOZAMBIQUE: Lagosta peluda; THAILAND: Kung boran.

Literature : Fischer & Bianchi (eds), 1984:vol. 5.

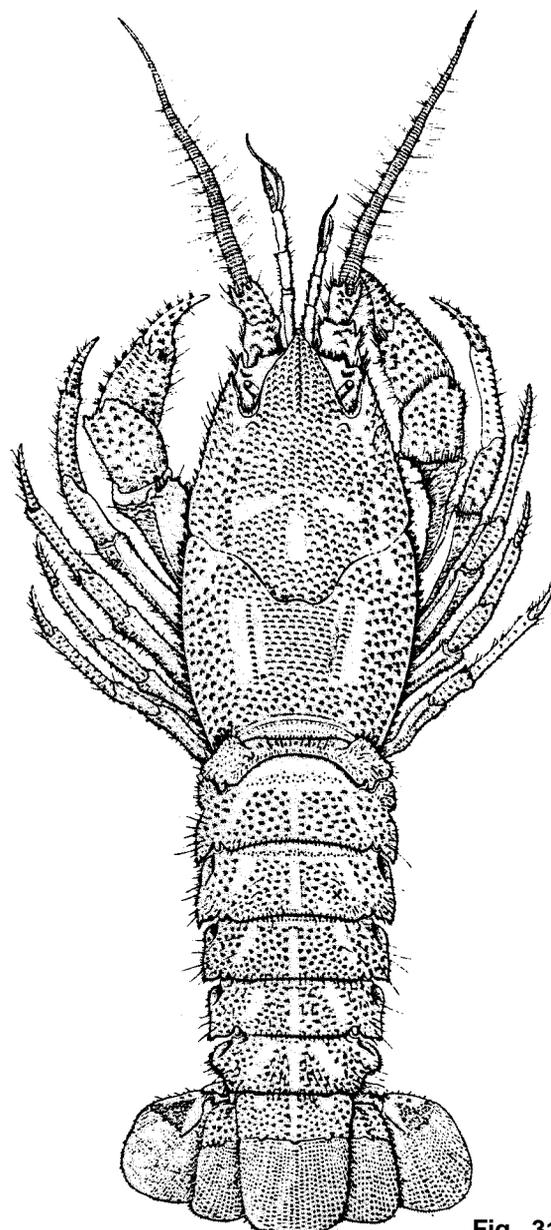
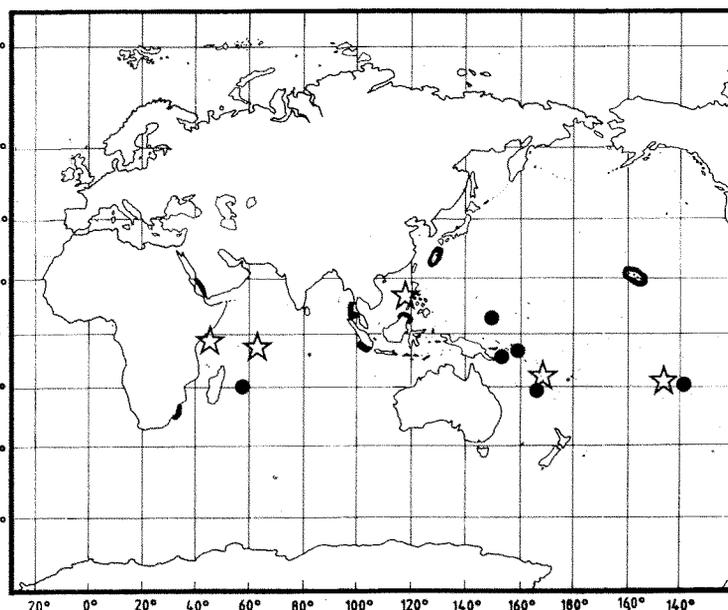


Fig. 315



☆ larval records (supposedly of this species) **Fig. 316**