

Interest to Fishery: In the Gulf of Genoa, Italy, the species is fished by "piropescherecci" at a depth of 150 to 400 m (Brian, 1941:9). In Tunisian waters it is "pêchée en assez petites quantités" by trawlers (Heldt, 1933:42). Zariquiey Alvarez (1968:50) indicated that the species "se captura en abundancia para su consumo" in Spanish Mediterranean waters. Still the Species seems to be of much less importance than the other Mediterranean penaeids listed here. On the West African coast the species is taken with *Parapenaeus longirostris*, but is hardly of commercial importance there; the West African material may belong to *S. africana* Stebbing, 1917, a species often confused with *S. membranacea*.

Solenocera pectinata (Bate, 1888)

SOLENO Soleno 10

Philonicus pectinatus Bate, 1888, Rep.Voyage Challenger, (Zool.), 24:279

Synonymy: *Philonicus cervicalis* Zehntner, 1894; ? *Solenocera pectinulata* Kubo, 1949.

FAO Names: Comb shrimp (En), Salicoque peigne (Fr), Camarón peine (Sp).

Literature: De Man, 1911:7,45; De Man, 1913, Pl. 4, Fig. 11; De Man, 1922:4, Pl. 1, Fig. 2.

Distribution: Indo-West Pacific: from East Africa and the Arabian Sea to the Malay Archipelago and the South China Sea, perhaps as far as Japan.

Habitat: Depth 15 to 118 m. Bottom mud, sand or coral. Marine.

Size: Total length 26 to 50 mm (♂), 26 to 54 mm (♀); maximum carapace length almost 16 mm. Kurian & Sebastian (1976:101) gave the maximum length as 75 mm.

Interest to Fishery: Minor or nil. Kurian & Sebastian (1976:101) listed the species among the Indian prawns of commercial importance, obtained at the southwest coast of India, but they stated that the species is only found in small numbers and that the small size of the specimens make them commercially unattractive, Muthu (1971:146) reported the species from commercial catches landed at Visakhapatnam and Kakinada (east coast of India).

FAMILY ARISTAEIDAE Wood-Mason, 1891

Aristaeina - Wood-Mason, 1891, Ann.Mag.Nat.Hist., (6)8:278

This family contains three genera of commercially important shrimps: *Aristaeomorpha*, *Aristeus* and *Plesiopenaeus*, all of which occur in deep waters.

Aristaeomorpha foliacea (Risso, 1827)

ARIST ARIS 1

Peneus foliaceus Risso, 1827, Hist.Nat.Eur.Mérid., 5:69

Synonymy: *Penaeus meridionalis* Hope, 1851 (nomen nudum); *Aristeus foliaceus* - Smith, 1885; ? *Aristeus rostridentatus* Bate, 1688; *Penaeopsis foliaceus* - Ortmann, 1890; *Aristaeomorpha giglioliana* Wood-Mason, 1892; *Plesiopenaeus foliaceus* - Faxon, 1895; *Aristaeomorpha mediterranea* Adensamer, 1898; ? *Aristeus japonicus* Yokoya, 1933. Several records of *Aristaeomorpha rostridentata* from the Indo-West Pacific do not pertain to the present species but to *A. woodmasoni* (see there).

FAO Names: Giant red shrimp (En), Gambon rouge (Fr), Gamba española (Sp).

Local Names: Langostino moruño (official Spanish name), Gamba roja, Chorizo (Spain), Crevette rouge, Grande crevette rouge (France), Gambaru de fundu (Monaco), Ammiru cani, U patri di ammiru, Ammiru turcu (Sicily, Italy), Gambero rosso (Italy), Garida (Greece), Ariston adorn (Israel), Rote Garnele (Germany; vid. Luther & Fiedler, 1967:121); Langostino rojo (Venezuela), Royal red prawn (New Zealand).

Distribution: Eastern Atlantic: Bay of Biscay to N.W. Africa and the entire Mediterranean.
Western Atlantic: South of Massachusetts to the Straits of Florida, Gulf of Mexico, Caribbean Sea, and Atlantic Ocean off Venezuela. Indo-West Pacific: East Africa to Japan, New Zealand and Fiji. The Indo-West Pacific records may pertain to a distinct species, *A. rostridentata* (Bate, 1888), which is usually identified with *A. foliacea*; however, some records of *A. rostridentata* do pertain to the related *A. woodmasoni* Calman (see there).

Habitat: Depth 250 to 1 300 m. Bottom mud. Marine.

Size: Maximum total length 170 mm (♂), 225 mm (♀).

Interest to Fishery: Mostly fished for at depths between 250 and 700 m, the species is obtained by commercial deep-sea trawlers off the Mediterranean coasts of Spain, France, Italy, Algeria and Israel. Off Venezuela the species is considered to be of "valor comercial innegable" (Davant, 1963:38). Longhurst (1970:299) mentioned that *A. foliacea* is landed at Durban, South Africa, without indicating the commercial importance of the species there. Crosnier & Jouannic (1973:12) considered the species "éventuellement conunercialisable" on the continental shelf of Madagascar. Richardson & Yaldwyn (1958:25) indicated *A. foliacea* as "commercially usable" in New Zealand waters (see also Anon., 1964:5,9, Fig. 3); in 1972 one trawler was in operation off N.E. New Zealand fishing for this species. *A. foliacea* is sold fresh or frozen.

Remarks: As already pointed out above the Indo-West Pacific records of the present species pertain to a form described originally as *A. rostridentata*, which is usually synonymized with *A. foliacea*, but the status of which is not yet perfectly clear. Next to *A. rostridentata* (= ? *A. foliacea*) a second species occurs in the Indo-West Pacific region; this species *A. woodmasoni*, which is definitely different from *A. foliacea*, has been incorrectly reported upon by some authors as *A. rostridentata* (see below).

Aristaeomorpha woodmasoni Calman, 1925

ARIST Aris 2

Aristaeomorpha wood-masoni Calman, 1925, Rep.Fish.Mar.Biol.Surv.Union S.Afr., 4:8

FAO Names: Indian red shrimp (En), Gambon indien (Fr), Gamba roja india (Sp).

Literature: Alcock, 1901:39 (as *Aristaeus (Aristaeomorpha) rostridentatus* Bate); Kemp & Sewell, 1912:17, Pl. I, Fig. 6 (as *A. rostridentata*).

Distribution: Indo-West Pacific: Arabian Sea; Bay of Bengal; Andaman Sea,

Habitat: Depth 330 to 500 m. Marine.

Size: Maximum total length 153 mm.

Interest to Fishery: Minor. Listed by Kurian & Sebastian (1976:95) as commercially important in India; but they remarked "obtained only in small numbers".

Remarks: This species has often, especially before 1925, been incorrectly indicated with the name *Aristaeomorpha rostridentata* (Bate), The latter species, which was originally described from the Indo-West Pacific region, is usually synonymized with *A. foliacea* (see there).

Aristeus alcocki Ramadan, 1938

ARIST Arist 2

Aristeus alcocki Ramadan, 1938, Sci.Rep.John Murray Exped., 1933-34, 5:40

FAO Names: Arabian red shrimp (En), Gambon d'Arabie (Fr), Gamba roja arábiga (Sp).

Distribution: Indo-West Pacific: Gulf of Aden; Arabian Sea; India; Bay of Bengal.

Habitat: Depth 270 to 1 086 m. Bottom mud. Marine.

Size: Maximum total length 150 mm, average length 110 mm (♂), 140 mm (♀).

Interest to Fishery: Potential. The species is listed by Kurian & Sebastian (1976:95) among (potentially) commercially important prawns in S.W. India, where the species was obtained in small numbers during exploratory trawling.

Aristeus antennatus (Risso, 1816)

ARIST Arist 1

Peneus antennatus Risso, 1816, Hist.Nat.Crust.Nice, 3:96

Synonymy: *Sycionia duvernoii* Risso, 1844 (nomen nudum).

FAO Names: Blue and red shrimp (En), Crevette rouge. (Fr), Gamba rosada (Sp).

Local Names: Gamba rosada (official Spanish name), Chorizo blanco, Gamba alistada, Carabinero (Spain), Crevette rouge (France), Gambaru de fundu (Monaco), Gambero rosso chiaro (Italy), Gánbao rossu-ciâeo (Genova, Italy), Ammiru cani (Sicily, Italy), Gambli rossi (Malta), Garida (Greece), Aristit (Israel).

Distribution: Eastern Atlantic: Portugal to the Cape Verde Islands; entire Mediterranean.

Habitat: Depth 200 to 1 440 m. Bottom soft mud. Marine.

Size: Maximum total length 220 mm.

Interest to Fishery: The species is highly esteemed as food. It is fished for by deep-sea trawlers off N.W. Africa and along the Mediterranean coasts of Spain, France, Italy and Malta. It is also taken by Israel trawlers, but less commonly so than *Aristaeomorpha foliacea*, while in the Western Mediterranean the opposite is true. The species is sold fresh.

Aristeus semidentatus Bate, 1881

ARIST Arist 3

Aristeus semidentatus Bate, 1881, Ann.Mag.Nat.Hist., (5)8:189

Synonymy: *Hemipenaeus semidentatus* - Bate, 1888.

FAO Names: Smooth red shrimp (En), Gambon lisse (Fr), Gamba roja lisa (Sp).

Distribution: Indo-West Pacific: Madagascar; Arabian Sea; Malay Archipelago; near Kermadec Islands; Hawaii.

Habitat: Depth 180 to 1 100 m. Bottom mud. Marine.

Size: Maximum total length 90 mm (♂), 178 mm (♀).

Interest to Fishery: Potential. So far the species is not yet commercially exploited, but several authors (e.g., Jones, 1967:1337 and Kurian & Sebastian, 1976:95) pointed to its commercial potential in view of the fact that it was obtained in fairly great numbers at exploratory cruises off Cochin, S.W. India.

Aristeus varidens Holthuis, 1952

ARTIST Arist 4

Aristeus varidens Holthuis, 1952, Réult.Sci.Expéd.Océanogr.Belge Eaux Côt.Afr.Atl.Sud, 1948-49, 3(2):71

FAO Names: Striped red shrimp (En), Gambon rayé (FR), Gamba listada (Sp).

Local Names: Listado (Spanish, see Crosnier & Tanter, 1968:3).

Literature: Crosnier & Forest, 1973:288, Figs. 96b,c, 97 a-c.

Distribution: Eastern Atlantic: continental shelf of West Africa between Rio de Oro (24°N) and S.W. Africa (18°S).

Habitat: Depth 300 to 1 134 m, most common between 400 and 600 m. Bottom mud. Marine.

Size: Maximum total length 190 mm (♀).

Interest to Fishery: According to Crosnier & Forest (1969:550) the species forms "l'objet d'une pêche commerciale assez active de la part de chalutiers espagnols au large de l'Angola . Crosnier & Tanter (1968:4) mentioned that the species is also fished for by Spanish trawlers off Guinea and Senegal. The prawns are sold frozen.

Aristeus virilis (Bate, 1881)

ARIST Arist 5

Hemipenaeus virilis Bate, 1881, Ann.Mag.Nat.Hist., (5)8:187

Synonymy: *Aristaeus tomentosus* Bate, 1881.

FAO Names: Stout red shrimp (En), Gambon gaillard (Fr), Gambón Colorado (Sp).

Literature: Kubo, 1949:194, Figures.

Distribution: Indo-West Pacific: East Africa to Japan, the New Hebrides and Indonesia.

Habitat: Depth 344 to 800 m. Bottom mud and sand. Marine.

Size: Total length 85 to 146 mm (♂), 81 to 190 mm (♀); carapace length 25 to 46 mm (♂), 24 to 52 mm (♀).

Interest to Fishery: Potential. Crosnier & Jouannic (1973:12) listed this species among those that they thought "éventuellement commercialisables" on the continental slope of Madagascar; it was found there together with *Aristeus mahabissae* Ramadan, 1938, the latter in smaller quantities. Kurian & Sebastian (1976:95) listed the species among the commercially important prawns of India, but at the same time stated that "only stray catches have been obtained", probably during exploratory cruises.

Plesiopenaeus edwardsianus (Johnson, 1863)

ARIST Plesio 1

Penaeus edwardsianus Johnson, 1868, Proc.Zool.Soc.Lond., 1867:897,901

Synonymy: *Aristeus edwardsianus* - Miers, 1878; *Aristeus coralinus* Bate, 1888; *Aristaeopsis edwardsiana* - Wood-Mason, 1891; *Aristeus splendens* Richard, 1900.

FAO Names: Scarlet shrimp (En), Gambon écarlat (Fr), Gamba carabinero (Sp).

Local Names: Carabinero (official Spanish name), Langostino moruno, Chorizo rojo (Spain), Crevette impériale, Crevette rouge géante (France), Crevette royale (Morocco), Rote Riesengarnele (Germany).

Literature: Crosnier & Forest, 1973:292, Figs. 98,99a,b.

Distribution: Eastern Atlantic: Portugal to South Africa; not in the Mediterranean. Western Atlantic: Grand Bank (43°42'N) to the Gulf of Mexico, Caribbean Sea and north coast of South America. Also reported from the Indo-West Pacific region, but it is not certain whether this is really the same species.

Habitat: Depth 274 to 1 850 m, most frequently found between 400 and 900 m. Bottom mud. Marine.

Size: Maximum total length 193 mm (♂), 334 mm (♀).