

there. Tirmizi (in Litt.) indicated *Metapenaeus stebbingi* as of major commercial importance on the Pakistan coast, where it is trawled, and exported frozen or canned, while it also is peeled, and cooked or fried, and used as shrimp meal and in paste. Kurian & Sebastian (1976:97) mention "stray catches only" of this species from N.W. India. In Madagascar *M. stebbingi* is reported to form a minor part of commercial catches made along the west and north-west coasts.

*Metapenaeus tenuipes* Kubo, 1949

PEN Metap 23

*Metapenaeus tenuipes* Kubo, 1949, J.Tokyo Coll.Fish., 36(1):348

Synonymy: *Metapenaeus spinulatus* Kubo, 1949.

FAO Names: Stork shrimp (En), Crevette cigogne (Fr); Camarón cigueña (Sp).

Distribution: Indo-West Pacific: Thailand; W. Indonesia; Malaya; Singapore.

Habitat: Depth 4 to 27 m. Marine.

Size: Maximum total length 97 mm.

Interest to Fishery: The species is taken in commercial catches in Malaya (Hall, 1961:86).

*Parapenaeopsis acclivirostris* Alcock, 1905

PEN Para 1

*Parapenaeopsis acclivirostris* Alcock, 1905, Ann.Mag.Nat.Hist., (7)16:522

FAO Names: Hawknose shrimp (En), Crevette aquiline (Fr), Camarón aguileño; (Sp).

Literature: Alcock, 1906:42, Pl. 8, Fig.27; Tirmizi & Bashir, 1973:58, Figs. 40L-P, 42.

Distribution: Indo-West Pacific: South and East Africa to India.

Habitat: Depth 24 to 48 m. Marine.

Size: Maximum total length 47 mm (♂), 73 mm (♀); carapace length 7 to 18.5 mm.

Interest to Fishery: Minor. Kunju (1967:1384) listed this species as "occurring in the fishery" off the Maharashtra coast of India. Kurian & Sebastian (1976:97) mentioned that the species is found in India "in small numbers with other commercial species".

*Parapenaeopsis arafurica* Racek & Dall, 1965

PEN Para 2

*Parapenaeopsis arafurica* Racek & Dall, 1965, Verh.K.Ned.Akad.Wet.(Natuurkd.), (2)56(3):102

FAO Names: Arafura shrimp (En), Crevette arafura (Fr), Camarón arafura (Sp).

Distribution: Indo-West Pacific: Australia (Northern Territory) and New Guinea (Gulf of Papua).

Habitat: Depth 16 m. Bottom mud. Marine.

Size: Total length 41 to 58 mm (♂), 51 to 78 mm (♀).

Interest to Fishery: Listed by Motosh (1977:6), who referred to Munro (1968), as a commercially important penaeid. Munro (1968:14), however, ranged the species among "smaller species regarded as having no commercial value".

*Parapenaeopsis atlantica* Balss, 1914

PEN Para 3

*Parapenaeopsis atlantica* Balss, 1914, Zool.Anz., 44:593

Synonymy: *Trachypenaeus constrictus africana* Balss, 1916.

FAO Names: Guinea shrimp (En), Crevette guinéenne (Fr), Camarón guineo (Sp).

Local Names: Tshengtsheng, Song (Ga language, Ghana), Sesew, Asisi (Winnebah language, Ghana), Bolu (Ewe language, Ghana), Musombé (Subu language, Cameroon), Mikossa (Vili language, Congo), Petite crevette (Congo).

Distribution: Eastern Atlantic: West African coast from Senegal to Angola.

Habitat: Depth 1 to 60 m (most abundant between 10 and 40 m). Bottom mud or sandy mud. Temperature not less than 16°C. Marine and estuarine.

Size: Maximum total length 173 mm (usually less: 60 to 90 mm (♂), 90 to 140 mm (♀)).

Interest to Fishery: The species is fished for practically throughout its range, but is not of such abundance that it is anywhere the main subject of the fishery. In the Ivory Coast, Cameroon and Congo (Brazzaville) it is fished by trawlers (Crosnier & Bondy, 1957:5,6), while also in Nigeria trawl fishing for the species has started (Thomas, 1969:415). Since the species occurs abundantly in shallow waters it forms the object of native inshore fisheries. Irvine (1947:308) mentioned that in Ghana these prawns are highly esteemed as food. Monod (1927:594) and Balss (1914a:593) mentioned their capture in fish traps in Cameroon.

*Parapenaeopsis cornuta* (Kishinouye, 1900)

PEN Para 4

*Penaeus cornutus* Kishinouye, 1900, J.Fish.Bur., Tokyo, 8:23

FAO Names: Coral shrimp (En), Crevette corail (Fr), Camarón coral (Sp).

Local Names: Coral prawn (Australia).

Literature: Kubo, 1949:374, Figures; Dall, 1957:215, Fig. 26.

Distribution: Indo-West Pacific: India to Japan and N. Australia.

Habitat: Depth 1 to 37 m. Marine.

Size: Total length 48.5 to 83 mm (♂), 49 to 82 mm (♀); maximum carapace length 24 mm.

Interest to Fishery: Minor. Muthu (1971:147) reported the species from commercial catches landed at the east coast of India (Visakhapatnam and Kakinada). Kunju (1967:1384) listed it as occurring in the fishery of the Maharashtra coast of India.

*Parapenaeopsis coromandelica* Alcock, 1906

PEN Para 5

*Parapenaeopsis styliifera coromandelica* Alcock, 1906, Cat. Indian Decap.Crust., 3(1):37

FAO Names : Coromandel shrimp (En), Crevette coromandel (Fr), Camarón coromandel (Sp).

Distribution: Indo-West Pacific: East coast of India, and Sri Lanka to Indonesia.

Habitat: Depth 7 to 11 m. Marine.

Size: Maximum total length 120 mm (♂), and (♀).

Interest to Fishery: Menon (1956:346) listed the present species under the "prawns of commercial value in India". Tham (1968:212), indicated it as commonly found in shrimp catches in Malaysia. De Bruin (1965:99) noted it to be very abundant off the west coast of Sri Lanka. Longhurst (1970:282, 284), who confirmed the commercial possibilities of the species in Sri Lanka, also thought it to be of potential value off the west coast of Thailand. The same author (Longhurst, 1970:285) indicated that the inshore fisheries along the north west coast of Malaya are dominated by two *Parapeneopsis* species, the less important of these being *P. coromandelica*.

Remarks: Many authors treated this form as a subspecies of *P. stylifera*. As the two are clearly distinct, and as the subspecific status of most marine crustacea is not well enough known, we follow here Hall (1962) in treating the present form as a full species.

*Parapeneopsis hardwickii* (Miers, 1878)

PEN Para 6

*Penaeus hardwickii* Miers, 1878, Proc.Zool.Soc.Lond., 1878:300,306

Synonymy: *Parapeneopsis sculptilis hardwickii* - Alcock, 1906.

FAO Names: Spear shrimp (En), Crevette javelot (Fr), Camarón lanzón (Sp).

Local Names: Hard spear prawn (Hong Kong).

Distribution: Indo-West Pacific: Pakistan to China and Indonesia.

Habitat: Depth 5 to 90 m. Marine.

Size: Maximum total length 135 mm (♂).

Interest to Fishery: Of minor commercial importance in Pakistan (Tirmizi, in Litt.) and N.W. India (Jones, 1967:1336; Longhurst, 1970:281), where it is commonly found in trawler catches. Kurian & Sebastian (1976:98) reported "good fishery for the species near Bombay, and less so on the east coast of India in the Godavery estuary". Along the west coast of Malaya and probably also that of Thailand, the species dominates in the inshore fishery (Longhurst, 1970:284,285). Near Singapore it is found in the offshore catches made by trawlers (Longhurst, 1970:288).

*Parapeneopsis hungerfordi* Alcock, 1905

PEN Para 7

*Parapeneopsis hungerfordi* Alcock, 1905, Ann.Mag.Nat.Hist., (7)16:522,530

FAO Names: Dog shrimp (En), Crevette chien (Fr), Camarón perro (Sp).

Local Names: Dog prawn (Hong Kong).

Distribution: Indo-West Pacific: Malaya and Indonesia to S. China.

Habitat: Depth 5 to 13 m. Marine.

Size: Maximum total length 104 mm.

Interest to Fishery: According to Tham (1963:212) the species is commonly found in shrimp catches in Malaya, while Longhurst (1970:284) indicated that it is one of the dominant species in catches made off N.W. Malaysia and probably also off the west coast of Thailand.

*Parapeneopsis maxillipedo* Alcock, 1905

PEN Para 8

*Parapeneopsis maxillipedo* Alcock, 1905, Ann.Mag.Nat.Hist., (7)16:522,527

Synonymy: *Parapeneopsis cornuta maxillipedo* - Racek & Dall, 1965.

FAO Names: Torpedo shrimp (En), Crevette torpille (Fr), Camarón torpedo (Sp).

Distribution: Indo-West Pacific: from the west coast of India and Sri Lanka to Malaya, the Philippines, Indonesia, New Guinea and northern Australia.

Habitat: Depth 9 to 11 m. Bottom mud. Marine.

Size: Maximum total length up to 121 mm.

Interest to Fishery: The species is reported to be of commercial value in Bombay waters (Kunju, 1967:1385). According to Tham (1968:212) it is commonly found in commercial catches made in Malayan waters.

*Parapenaeopsis nana* Alcock, 1905

PEN Para 9

*Parapenaeopsis nana* Alcock, 1905, Ann.Mag.Nat.Hist., (7)16:522,529

FAO Names: Dwarf shrimp (En), Crevette naine (Fr), Camarón enano (Sp).

Literature: Alcock, 1906:41, Pl. 8, Fig. 26.

Distribution: Indo-West Pacific: India; Sri Lanka.

Habitat: Depth 7 to 124 m. Marine.

Size: Maximum total length 55 mm; carapace length 10.5 to 12 mm (♂), 11 to 12 mm (♀).

Interest to Fishery: Little or none. Kurian & Sebastian (1976:98) listed the species among the commercially important prawns of India, but remarked that the specimens have been taken only in stray catches on the east coast.

*Parapenaeopsis probata* Hall, 1961

PEN Para 10

*Parapeneopsis probata* Hall, 1961, Bull.Raffles Mus., 26:96

Synonymy: According to De Bruin (1965:96) *Pampenaeopsis probata* is a synonym of *P. uncta* Alcock, 1905.

FAO Names: Parole shrimp (En), Crevette parole (Fr), Camarón parolo (Sp).

Distribution: Indo-West Pacific: Kuwait; Malaya; Singapore.

Habitat: Depth 44 to 82 m. Bottom clean. Marine.

Size: Maximum carapace length 22 mm (♂), 31 mm (♀).

Interest to Fishery: The species is mentioned by Longhurst (1970:288) as a species taken from trawl catches off Singapore.

*Parapenaeopsis sculptilis* (Heller, 1862)

PEN Para 11

*Penaeus sculptilis* Heller, 1862, Verh.Zool.-Bot.Ges.Wien, 12:528

Synonymy: ? *Parapenaeopsis sculptilis cultrirostris* Alcock, 1906; ? *Parapenaeopsis cultrirostris* - Kubo, 1949.

FAO Names: Rainbow shrimp (En), Crevette arc-en-ciel (Fr), Camarón arco iris (Sp).

Local Names: Kiddi (Pakistan; a name also used for other species of approximately the same size), Baga tara ichha, Bagtara chingri (Bangladesh), Rainbown prawn, Coral prawn (Australia).

Literature: Kirkegaard & Walker, 1970b.

Distribution: Indo-West Pacific: from Pakistan to Malaya, Hong Kong, the Philippines, Indonesia, New Guinea and N. Australia.

Habitat: Depth 35 to 90 m. Marine.

Size: Maximum total length 170 mm.

Interest to Fishery: In Pakistan the species is of moderate importance; it is peeled and is exported frozen and canned, it is also cooked and fried and used as shrimp meal and in shrimp paste (Tirmizi, in Litt.). In India it occurs in commercial catches off Bombay and off the Ganges delta (Jones, 1967:1336). Kurian & Sebastian (1976:98) mentioned that there is "a small fishery in the northern east and west coasts" of India. In Bangladesh it "is found in abundance in the estuaries"... "and provides a lucrative fishery" (Ahmad, 1957:13). Also in Malaya and Singapore it is of commercial importance (Tham, 1968:212, for Malaya; Kubo, 1949:390 mentioned a specimen from the Singapore fish market). In Australia the species is of commercial value North of Cape Moreton, Queensland (Racek, 1959:12). Grant (1965:242) remarked that "it is a popular bait species on the Central Queensland coast".

*Parapenaeopsis stylifera* (H. Milne Edwards, 1837)

PEN Para 12

*Penaeus styliferus* H. Milne Edwards, 1837, Hist.Nat.Crust., 2:418

Synonymy: *Penaeopsis stylifera* - Bate, 1881.

FAO Names: Kiddi shrimp (En), Crevette kidi (Fr), Camarón kidi (Sp).

Local Names: Kiddi (Pakistan, also used for other species of about the same size).

Literature: Rao, 1970.

Distribution: Indo-West Pacific: Kuwait; Pakistan; India (mainly on the west coast and southern part of the east coast); Sri Lanka; Bangladesh.

Habitat: Depth 20 to 90 m. Marine.

Size: Maximum total length 145 mm.

Interest to Fishery: The species is of major commercial importance in Pakistan (Tirmizi, in Litt.), and all along the west coast of India: Kutch (Ramamurthy, 1967:1426), Bombay (Jones, 1967:1336), Karwar (Radakrishnan, 1967:1422) and Travancore in present Kerala State, where according to Chopra (1943:3) the species "is fished on a very large scale in the littoral regions". Ahmad (1957:12) listed it among the economic prawns of Bangladesh.

*Parapenaeopsis tenella* (Bate, 1888)

PEN Para 13

*Penaeus tenellus* Bate, 1888, Rep.Voyage Challenger, (Zool.), 24:270

Synonymy: *Penaeus crucifer* Ortmann, 1890; *Metapenaeus tenellus* - Alcock, 1905; *Metapenaeus crucifer* - Alcock, 1905.

FAO Names: Smoothshell shrimp (En), Crevette- glabre (Fr), Camarón liso (Sp).

Local Names: Subesube ebi (Japan), Smooth shelled prawn (Hong Kong).

Distribution: Indo-West Pacific: from Japan and Korea south to northern Australia, New Guinea, Indonesia, Malaya, Bangladesh, India, Sri Lanka, and Pakistan.