ABSTRACT: Twenty-two new decapod species records, nine new generic records, and two new familial records are reported for the Hawaiian Islands. Most represent widely distributed Pacific or Indo-Pacific species, though one is an undescribed species of gnathophyllid shrimp and three are also known to occur in the Atlantic Ocean.

The number of decapod species known from the Hawaiian Islands has gradually increased as material from new habitats has been collected, and as other material has been more thoroughly examined. This report presents twenty-two species previously unknown in the Hawaiian Islands. Of these, nine are also new generic records, and two are new familial records. The material reported herein is maintained at the Bernice P. Bishop Museum (BPBM), Honolulu, Hawaii.

FAMILY BRESIILIDAE
Discias exul Kemp
Discias exul Kemp, 1920: 138, text–figs. 1–3, pl. 8; Kensley, 1983: 3 (key), 13, figs. 10a–p, 11a, b.

MATERIAL EXAMINED: Two specimens, BPBM S10630, Oahu, Kahe Pt., coll. S. Coles, 5 August 1977, HECO 6B#5; one specimen, BPBM S10631, Oahu, Kahe Pt., coll. S. Coles, 5 August 1977, HECO 7C#4.

DISTRIBUTION: Andaman Islands, South Africa, and Australia.

REMARKS: This is the first record of a species in the family Bresiliidae to be reported from Hawaiian waters.

FAMILY PALAEMONIDAE
Fennera chacei Holthuis
Fennera chacei Holthuis, 1951: 171, pl. 54 figs. a–p; Bruce, 1983: 196 (key), 202.


DISTRIBUTION: From the western Indian Ocean to Australia, the Hawaiian Islands, and the eastern Pacific.

REMARKS: Fennera chacei is a small pontoniine shrimp that is generally associated with corals in the genus Pocillopora Lamarck, 1816 (Bruce, 1976a).

Leandrites cyrtorhynchus Fujino and Miyake

MATERIAL EXAMINED: 1 ♀ (ovig.), BPBM S10068, Oahu, Makua, coll. W. Sugiyama, 1 May 1982, depth 15 m, in small hole at the base of a barren rock slope or dropoff; 1 specimen, BPBM S10069, Oahu, Nanakuli, coll. D. Yamaguchi, 4 May 1982, depth 15 m, solid rock cave at base of a rock slope.

DISTRIBUTION: Leandrites cyrtorhynchus has been reported previously from Japan and New Caledonia, and Bishop Museum has specimens from the Hawaiian Islands and Enewetak Atoll (BPBM S10091).

REMARKS: Leandrites cyrtorhynchus is a cleaner shrimp that is usually active at night. In Hawaii it is known to be associated with the following fish: Arothron hispidus (Linnaeus, 1758) (BPBM Photos 1299, 1299a), Acanthurus leucopareius (Jenkins, 1903) (BPBM Photo 1266), Scarus perspicillum Steinachner, 1879 (BPBM Photos 1263, 1264), Scarus...
rubroviolaceus Bleeker, 1847 (BPBM Photo 1265), and Naso lituratus (Bloch and Schneider, 1801) (BPBM Photo 1245).

FAMILY GNATHOPHYLLIDAE

Gnathophyllum sp.


REMARKS: This is a new species of gnathophyllid shrimp (Titgen, in press) that is cryptic and seldom seen. However, it has been known and photographed around the Hawaiian Islands for some time (BPBM Photos 221–223, 1292, 1293), although only two specimens have been collected. Most sightings have occurred at night in caves, at a depth of about 10 m.

FAMILY HIPPOLYTIDAE

Thor amboinensis (de Man)

Hippolyte amboinensis de Man, 1888: 535.

Thor amboinensis: Miyake and Hayashi, 1966: 152, figs. 5, 6, 8b; Bruce, 1976b: 51, fig. 22C.


DISTRIBUTION: From the western Indian Ocean to Palau, Japan, and the Hawaiian Islands. Also known from the western Atlantic.

REMARKS: This widely distributed Indo-Pacific species is known to be associated with a wide variety of coelenterates, including sea anemones, corals, and hydrocorals (Patton, 1966; Bruce, 1976a, 1976b; Suzuki and Hayashi, 1977).

Thor paschalis (Heller)

Hippolyte paschalis Heller, 1861: 276, pl. 3 fig. 24.

Thor paschalis: Bruce, 1976b: 50, fig. 22B.

FAMILY PANDALIDAE

Stylopandalus richardi Coutière

Pandalus (Stylopandalus) Richardi Coutière, 1905: 1115


REMARKS: Stylopandalus richardi is found from a depth of 3600 meters to the surface, and has been collected in all major tropical and temperate seas (Chace, 1985).

FAMILY SCYLLARIDAE

Scyllarus ?cultrifer (Ortmann)

Arctus cultrifer Ortmann, 1897: 272.
**Scyllus cultrifer**: Holthuis, 1946: 93, pl. 8 figs c–e.

**Material Examined**: 1 ♀ (ovig.), BPBM S10633, Northwestern Hawaiian Islands, Brooks Bank, coll. C. Sordin, 24 May 1980, depth 125 m, regurgitated by a grouper, Epinephelus quernus.

**Distribution**: East Africa, the Philippines, Japan, and the Hawaiian Islands

**Scyllus vitiensis** (Dana)

Arctus Vitiensis Dana, 1852: 19.


**Distribution**: Fiji, Ambolina, Ndjungga Island.

**Family Diogenidae**

Calcinus argus: Wooster

**Calcinus argus** Wooster, 1984: 133, figs. 3A–E.

**Material Examined**: 1 ♂, 1 ♀ (ovig.), BPBM S10629, Oahu, Kahe Pt., coll. R. H. Titgen, 4 May 1985, coral, rock and sand, depth 3–6 m.

**Distribution**: Mariana Islands and the Hawaiian Islands.

**Remarks**: *Calcinus argus* is immediately recognizable by its unique color pattern. It is the only described *Calcinus* species with the first three pereiopods a dark maroon color with white spots (Wooster, 1984).

**Family Galatheidae**

*Munida aff. heteracantha* Ortmann

Munida heteracantha Ortmann, 1892: 255, pl. 11 fig. 12.

**Material Examined**: 1 ♀, 1 juv., BPBM S10289, Hawaii, 12.9 km NE of Kauhola Pt., 20°20.7’N, 155°47.5’W, *Proteus* Sta. 103, 5 September 1971, depth 460 m, rocky coral bottom.

**Distribution**: Bonin Islands and Japan.

**Remarks**: Baba (1969) lists the depth range for *Munida heteracantha* as 30–350 m. The Hawaiian specimens were collected at a depth of 460 m.

*Munida normani* Henderson

*Munida Normani* Henderson, 1885: 408.

**Material Examined**: 1 ♂, BPBM S7990, Molokai Channel, depth 365–460 m, *Pele* Expedition, coll. M. King, 10 October 1966, tangle net; 1 ♂, 3 ♀♀, BPBM S10288, Hawaii, 12.9 km NE of Kauhola Pt., 20°20.7’N, 155°47.5’W, *Proteus* Sta. 103, 5 September 1971, depth 460 m, rocky coral bottom.

**Distribution**: Fiji and the Hawaiian Islands.

**Family Chiostylidae**

*Eumunida picta* Smith

Eumunida picta Smith, 1883: 44, pl. 2 fig. 2, pl. 3 figs. 6–10, pl. 4 figs. 1–3A.

**Material Examined**: 1 ♀, BPBM S10282, Oahu, Kaiwi Channel, 10 km off Makapuu Pt., November 1972, depth 365 m, precious coral beds; 2 ♀♂, BPBM S10283, Oahu, Kaiwi Channel, off Makapuu Pt., coll. B. Madden, February 1975, depth 365 m, associate with precious coral (Corallium) colony.

**Remarks**: *Eumunida picta* is known primarily from the Atlantic Ocean.

**Family Albuneidae**

*Albunea thurstoni* Henderson

Albunea Thurstoni Henderson, 1893: 409, pl. 38 figs. 13–15.

*Albunea thurstoni*: Gordon, 1938: 187, figs. 3A, i, k; Serène and Umali, 1965: 87, 89, 90 (key), 99–102, 105, figs. 8, 9A, pl. 1 fig. 3, pl. 2 fig. 3, pl. 3 fig. 2, pl. 4 fig. 3, pl. 5 figs. 1, 1A, Serène, 1973: 263 (key).
MATERIAL EXAMINED: 1 ♂, BPBM S5343, Oahu, off Waikiki, coll. Smith and Allen, 23 May 1948, dredged at 23 m; 1 ♀, BPBM S5348, Oahu, off Waikiki, coll. Allen and Smith, 30 May 1948, dredged at 6 m; 1 ♂, BPBM S6775, Oahu, Kahana Bay, Pele Expedition, 25 July 1959, depth 46–64 m; 1 ♀, BPBM S6776, Oahu, off Sand Island, Pele Expedition, 17 July 1959, 293–46 m; 1 ♀, BPBM S6777, Oahu, Diamond Head, Pele Expedition, 4 September 1959, depth 46–82 m; one specimen (dry, damaged), BPBM S7806, Oahu, Kaneohe Bay, 23 June 1924, dredged at 6 m.

DISTRIBUTION: India, the Red Sea, and the Hawaiian Islands.

REMARKS: In addition to Albunea thurstoni, A. speciosa Dana, 1852, is also known from the Hawaiian Islands. The two species can be separated by the shape of the eye stalks and the number of spines on the anterolateral border of the carapace. The eye stalks of A. speciosa are relatively long and gradually taper distally, with the external lateral border slightly concave, whereas, in A. thurstoni the eye stalks are short with the external lateral border slightly convex. There are 11–12 spines on the anterolateral border of A. speciosa, and 8–9 on A. thurstoni.

FAMILY DROMIIDAE

Lasiodromia sp.

MATERIAL EXAMINED: 1 ♂, BPBM S10296, Oahu, Pokai Bay, 2.4–3.2 km out, Pele Expedition, 31 July 1959, haul 195, depth 26–30 m, bottom with sand, coral, algae, and ammunition.

REMARKS: Lasiodromia Alcock, 1901, is a rather uncommon genus of dromiid crabs. At present there are two described species, Lasiodromia cuppingeri (Miers, 1884), known from the Indian Ocean, and L. unidentata Ihle, 1913, known from Timor Island and Japan (Sakai, 1976).

FAMILY HOMOLIDAE

Homola ikedai Sakai, 1979: 4, text-figs. 1b, 3c, Frontispiece fig. 1; Guinot and Richer de Forges, 1981c: 534, text-figs. 2A, 2A1, pl. 2 figs. 2–2b, pl. 8 figs. 1, 1a.


MATERIAL EXAMINED: 1 ♂, 1 ♀, BPBM S10637, Oahu, 4 km off Buoy 1, Pearl Harbor Entrance, coll. E. Chave, 27 February 1976, Easy Rider, depth 338 m, in shrimp trap.

DISTRIBUTION: Japan, the Loyalty Islands, the Hawaiian Islands, and possibly Guam.

REMARKS: The holotype of Homola dickinsoni Eldredge, 1980 (BPBM S8595), closely fits the description and illustrations of H. ikedai. However, specimens should be compared to determine if they are in fact the same species.

Hypsophrys williamsi Takeda

Hypsophrys williamsi Takeda, 1980: 282, figs. 2, 3.

MATERIAL EXAMINED: 1 ♂, 2 ♀♀, BPBM S10614, Hawaii, Kona, August 1984, depth about 610 m, caught in Heterocarpus trap; 1 ♂, 1 ♀ (ovig.), BPBM S10628, Hawaiian Islands, 4–5 October 1980, depth about 366 m, caught in shrimp trap.

DISTRIBUTION: Japan and the Hawaiian Islands.

Paromola spinimana Griffin

Paromola spinimana Griffin, 1965: 87, text-figs. 1–8, pls. 1, 2; Sakai, 1976: 41, pl. 11.

Homola japonica Clarke, 1972: 313 [part].

MATERIAL EXAMINED: 1 ♀, BPBM S7866, Oahu, Barbers Pt., coll. T. Clarke, 28–29 October 1969, depth 183 m, gill net.

DISTRIBUTION: New Zealand, Japan, and the Hawaiian Islands.

REMARKS: Except for this specimen, the only species in the genus Paromola Wood-Mason, 1891, reported from the Hawaiian Islands is P. japonica Parisi, 1915. Most of Clarke's (1972) observations and collected specimens were probably of P. japonica, which is common in deeper Hawaiian waters. However, the single specimen from his study that he deposited in the Bishop Museum is P. spinimana.
New Decapod Records — TIGEN

FAMILY RANINIDAE

Notosceles viaderi Ward

Notosceles viaderi Ward 1942: 47, pl. 4 figs. 5, 6; Serène and Umali, 1972: 36; Crosnier, 1976: 239, fig. 6a–h.


MATERIAL EXAMINED: 1 ♀, BPBM S10609, Northwestern Hawaiian Islands, French Frigate Shoals, South Bank, Easy Rider, 15 March 1979, depth 128 m, specimen regurgitated on deck by a grouper, Epinephelus guer- nus; 1 ♀, BPBM S6795, Hawaiian Islands, Oahu, off Sand Island, Pele Expedition, 18 July 1959, dredged at 305–110 m.

DISTRIBUTION: Mauritius, La Reunion, and the Hawaiian Islands.

FAMILY GONYONIDAE

Progeryon sp.

MATERIAL EXAMINED: 1 ♀, BPBM S10626, Oahu, 4.8 km off Pearl Harbor, coll. E. Chave, 18 July 1977, Easy Rider, depth 420 m, sandy bottom; 1 ♀, BPBM S10612, Hawaii, Kona, August 1984, depth about 610 m, caught in Heterocarpus trap; 1 ♀, BPBM S10627, Northwestern Hawaiian Islands, Midway Island, coll. P. Struhsaker, November 1980, Easy Rider II Cruise 80–02, Sta. 54; 1 ♀, BPBM S8563, Northwestern Hawaiian Islands, Nihoa Island, NMFS Sta. 1, depth 440 m.

REMARKS: There are three described species in the genus Progeryon Bouvier, 1922, in the Indo-Pacific. Progeryon guinotae Crosnier, 1976, is known from the Indian Ocean and questionably from the Emperor Seamount Chain, which is located northwest of the Hawaiian Islands (Sakai, 1978; Guinot and Richer de Forges, 1981a). The other two species, P. vaubani Guinot and Richer de Forges, 1981, and P. mararae Guinot and Richer de Forges, 1981, were described from the Loyalty Islands and the Tuamotu Archipelago, respectively. The Hawaiian specimens seem to correspond to the species reported by Sakai (1978) from the Emperor Seamount Chain.

FAMILY GONEPLACIDAE

Beuroisia major (Sakai)

Neopilumnoplax major Sakai, 1978: 8, text-figs 16, 17, pl. 2 fig. A.

Beuroisia major: Guinot and Richer de Forges, 1981b: 233, 236, 237, 242, 244, figs, 5A, B, 7H, pl. 4 figs. 4–5a, pl. 5 figs. 2, 3.

MATERIAL EXAMINED: 1 ♂, BPBM S10624, Hawaii, Kawaihae, 1970, depth 393 m; 1 ♂, BPBM S8560, Northwestern Hawaiian Islands, 40 km W of Maro Reef, 25°22'N, 170°58'W, Townsend Cromwell Station TC-78-03 Stn. 14, 17 August 1978, depth 420 m, trap.

DISTRIBUTION: Emperor Sea Mount Chain and the Hawaiian Islands.

REMARKS: Both specimens with pedunculate barnacles, Trilasmis (Poecilasma) kaempheri (Darwin, 1851), primarily on the peropods, but also on the anterolateral border of the female specimen.

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