Remarks: The holotype has a non-calcified circular spot on the dorsal surface of each ischium of P1–3, but it is absent from the other specimens. This spot is different from that of the ventral surface of the P1 fixed finger in *Munidopsis lentigo* Williams and van Dover, 1983, and thus awaits histological studies.

Torbenia insolita (Macpherson, 2004) is characterized by the following features that separate it from the new species: the abdominal segment 4 bears no spine on the posterior ridge; the basal antennular article bears a small distomesial and a pronounced distolateral spine; the distomesial spine of the antennal article 2 is strong, overreaching the midlength of the article 4, and the P2–4 dactyli bears spinules on the flexor margin.

Range: Kei Islands and Norfolk Islands; between 260 m and 390–407 m.

Etymology: The specific name is a noun in apposition from the Latin *orbis* (circle, orbit) referring to the orbit visible from dorsal view.

A LIST OF INDO-PACIFIC DEEP-SEA SPECIES OCCURRING IN DEPTHS EXCEEDING 200 M

This list includes species that lack depth records but are considered to be deep-sea inhabitants, as well as those that are known on the continental shelf but supposed to go down to transitional depths and/or deeper. Such species are placed in brackets. Truly deep-sea species are in bold face. Species transferred to different genera are in ordinary type, as also are species relegated to synonym. Species hardly acceptable because of brief description are given an asterisk. Locality and depth records are provided for each reference. The repository and registration number of the type material are given where possible. Station data of the "Investigator" material are complemented by Anonymous (1914). Generic and specific names are in alphabetical order. Brief notes on vertical and horizontal distributions are provided for each multispecies genus. A key to species for each genus is provided where necessary.

Family Chirostylidae Ortmann, 1892

Genus *Chirostylus* Ortmann, 1892

Chirostylus Ortmann, 1892: 246 (gender: masculine).

Type species: *Chirostylus dolichopus* Ortmann, 1892, by monotypy.

Distribution: One of the five known species (*C. novaecaledoniae* Baba, 1991) occurs in transitional depths below 200 m. *Chirostylus dolichopus* Ortmann, 1892 ranges between the continental shelf and transitional depths, and the other three species are so far known from shallow waters but may be found in depths <200 m. Known only from the Indo-West Pacific.

Key to species

1. Abdominal segment 4 with posteromedian projection ..... *C. michelae* Tirmizi & Javed, 1979
– Abdominal segment 4 smooth on posterior margin 2
2. Rostral base short subtriangular, with median spine extending to between distal articles of ocular peduncles. Anterior margin of sternite 3 with small median sinus ..... *C. rostratus* Osawa & Nishikiori, 1998
– Rostral base convex on anterior margin, with or with very small median spine barely reaching distal articles of ocular peduncles. Anterior margin of sternite 3 without median sinus 3
3. Gastric region unarmed other than pair of epigastric spines. Penultimate spine of P2–4 dactyli distinctly stronger than ultimate ..... *C. dolichopus* Ortmann, 1892
– Gastric region with spine on posterior portion in addition to pair of epigastric spines. Penultimate and ultimate spines of P2–4 dactyli subequal 4
4. Spine on anterior part of cardiac region; row of 3 spines along posterior branchial margin anterior to posterolateral excavation ..... *C. novaecaledoniae* Baba, 1991
– No spine on cardiac region; 1 spine on

posterior branchial region dorsal to beginning of posterolateral excavation
..... *C. ortmanni* Miyake & Baba, 1968

Chirostylus ciliatus van Dam, 1933
Transferred to *Uroptychus* Henderson, 1888.

***Chirostylus dolichopus* Ortmann, 1892**
Chirostylus dolichopus Ortmann, 1892: 246, pl. 11: figs. 2, 2b, 2c, 2e, 2i, 2o, 2z (type locality: Kadsiyama [= Katsuyama], Sagami Bay, shallow water [holotype, ♂, MZS 347]). — Miyake, 1960: 97, pl. 48: fig. 8 (no record). Miyake & Baba, 1968: 381, figs. 1b, 2 (Sagami Bay, 63–70 m). — Haig, 1974: 447 (Western Australia). — Tirmizi & Khan, 1979: 86, fig. 6 (E coast of Somali Republic & Mozambique Channel, 88–140 m). — Miyake, 1982: 143, pl. 48, fig. 1 (Kushimoto, S Kii Peninsula, Japan). — Takeda, 1982: 49, fig. 147 (no record). — Baba, 1988: 5 (Sulu Archipelago, 35–42 m); this paper (Mauritius, 73–238 m).
Not *Chirostylus dolichopus*: Ogawa & Matsuzaki, 1993: 65, fig. 2 (= *U. ortmanni* Miyake & Baba, 1968).

[*Chirostylus micheleae* Tirmizi & Khan, 1979]
Chirostylus micheleae Tirmizi & Khan, 1979: 78, figs. 1–5 (E coast of Somali Republic and Mozambique Channel, 75–140 m; type locality: NE coast of Somali Republic, 75 m [holotype, ♂, USNM 171609]).

***Chirostylus novaecaledoniae* Baba, 1991**
Chirostylus novaecaledoniae Baba, 1991a: 464, figs. 1, 8a (Loyalty and Chesterfield Islands, 236–270 m; type locality: Loyalty Islands, 20°42.18'S, 167°00.40'E, 270 m [holotype, ♂, MNHN Ga 2069]).

[*Chirostylus ortmanni* Miyake & Baba, 1968]
Chirostylus ortmanni Miyake & Baba, 1968: 383, figs. 1c, 3 (type locality: N Kyushu, Japan, 90 m [holotype, ♀, ZLKU 13761]).
Chirostylus dolichopus: Ogawa & Matsuzaki, 1933: 65, fig. 2 (Miyake-jima, Kushimoto (Wakayama Pref.), Sakurajima (Kagoshima), and Akajima (Okinawa), Japan, 10–40 m [not *C. dolichopus* Ortmann, 1892]).

[*Chirostylus rostratus* Osawa & Nishikiori, 1998]
Chirostylus rostratus Osawa & Nishikiori, 1998: 382, figs. 1, 2 (type locality: Ogasawara Islands, 180 m [holotype, ♂, NSMT-Cr 12028]).

Genus *Eumunida* Smith, 1883
Eumunida Smith, 1883: 44 (gender: feminine).

Type species: *Eumunida picta* Smith, 1883, by monotypy.

Distribution: The genus now contains 26 species, 24 from the Indo-West Pacific (see below) and two (*E. bella* de Saint Laurent & Macpherson, 1990 and *E. picta* Smith, 1885) from the Atlantic.

Twenty-two species are known from the western Pacific, two of which occur also in the Indian Ocean, and one of which occurs in the Southern Ocean. Indian Ocean species are two in number, both from Madagascar. The majority of the species have been taken from transitional depths (200–700 m); seven of these further go down to upper bathyal depths and three of these go up to the continental shelf. One species is so far known from a lower part of the shelf only, and another one from a depth >700 m.

A key to Indo-West Pacific species was given by de Saint Laurent & Poupin (1996: 342).

***Eumunida ampliata* de Saint Laurent & Poupin, 1996**
Eumunida smithii: Gordon, 1930: 749 (part), fig. 10b–c (Sahul Bank S of Timor). —Van Dam, 1933: 11 (South of Kei Islands, 204–304 m). — Baba, 1988: 13 (part), fig. 3e (reexamination of type material of *E. smithii* from S of Timor) (not fig. 3a–d, South China Sea off SW Formosa, 421 m = *E. capillata* de Saint Laurent & Macpherson, 1990).
Eumunida (Eumunidopsis) ampliata de Saint Laurent & Poupin, 1996: 368, figs. 7a–e, 8a–e, 12c (Indonesia S of Timor and Kei Islands, 204–304 m; type locality: S of Timor, Sahul Bank, 10°30'S, 126°35'E, depth unknown [holotype, ♀, BMNH 1919.9.1.6-10]).
Eumunida ampliata: Baba, this paper (Manado Bight, N Sulawesi and Japan, 366–458 m).

***Eumunida annulosa* de Saint Laurent & Macpherson, 1990**
Eumunida annulosa de Saint Laurent & Macpherson, 1990a: 249, figs 1b, 8a, b, 9a–j (New Caledonia, Chesterfield Islands, 375–650 m; type locality:

New Caledonia, 24°54.96'S, 168°21.91'E, 500 m [holotype, ♂, MNHN Ga 1781]).

Eumunida (Eumunida) annulosa: de Saint Laurent & Poupin, 1996: 364 (no record).

***Eumunida australis* de Saint Laurent & Macpherson, 1990**

Eumunida picta: Gordon, 1930: 742 (part), fig. 1b (Tasman Sea, 685 m).

Eumunida sp. de Saint Laurent & Macpherson, 1990a: 249, fig. 6d (N of Australia; Tasman Sea, material reported by Gordon (1930)).

Eumunida australis de Saint Laurent & Macpherson, 1990b: 664, figs. 2d, 4d, 5d, 6d, 8d, 8h, 10d, 11 (type locality: Tasman Sea, 38°13'S, 168°42.5'E, 685 m [holotype, ♂, BMNH 1907.16.10]).

Eumunida (Eumunida) australis: de Saint Laurent & Poupin 1996: 364 (off Southport, SE Queensland, 590 m). — Shane & Poore, 2004: 5 (New South Wales, 300–436 m).

***Eumunida balssi* Gordon, 1930**

Eumunida smithii: Balss, 1913b: 21 (part), fig. 16 (Sagami Bay, 600 m).

Eumunida balssi Gordon, 1930: 752 (type locality: Sagami Bay, 600 m [holotype, ♂, ZSM 103/1]). — Baba, 1988: 11 (Sagami Bay and W of Kyushu, 249 m). — de Saint Laurent & Macpherson, 1990a: 266, fig. 13b, f, h, m (reexamination of type material). — Baba, this paper (Japan W of Nagasaki and Sagami Bay, between 179–201 m and 732 m).

Eumunida (Eumunidopsis) balssi: de Saint Laurent & Poupin, 1996: 375, figs. 13a–b (reexamination of type material).

Not *Eumunida balssi*: van Dam, 1933: 10 (= *E. smithii* Henderson, 1885).

***Eumunida bispinata* Baba, 1990**

Eumunida bispinata Baba, 1990: 925, fig. 1 (type locality: Madagascar, 12°39.5'S, 48°15.6'E, 450 m [holotype, ♂, MNHN Ga 1506]).

Eumunida (Eumunidopsis) bispinata: de Saint Laurent & Poupin, 1996: 373 (no record).

***Eumunida capillata* de Saint Laurent & Macpherson, 1990**

Eumunida smithii: Baba, 1988: 12 (part), fig. 3a–d (South China Sea off SW Formosa, 421 m) (not fig. 3e, South of Timor = *E. ampliata* de Saint Laurent & Poupin, 1996).

Eumunida capillata de Saint Laurent & Macpherson, 1990a: 254, figs. 1c, 8c–d, 10a–k, 15, 17b (New Caledonia and Chesterfield Islands, 418–650 m; type locality: New Caledonia, 23°38.60'S, 167°43.12'E, 418 m [holotype, ♂, MNHN Ga 1783]). — Baba, this paper (Bali Sea, 200 m).

Eumunida (Eumunidopsis) capillata: de Saint Laurent & Poupin, 1996: 374 (New Caledonia (examination of type material), Chesterfield Islands, Indonesia, China Sea off S Taiwan), between 356–368 m and 439–459 m). — Shane & Poore, 2004: 6 (New South Wales, 366–377 m).

***Eumunida debilistriata* Baba, 1977**

Eumunida debilistriata Baba, 1977c: 154, fig. 9 (type locality: off Midway Island, 700–800 m [holotype, ♂, NSMT-Cr. 4360]).

Eumunida (Eumunidopsis) debilistriata: de Saint Laurent & Poupin, 1996: 372 (no record).

***Eumunida depressa* de Saint Laurent & Poupin, 1996**

Eumunida funambulus: Miyake, 1982: 144, pl. 48: fig. 3 (Kyushu-Palau Ridge, 520 m).

Eumunida pacifica: Baba in Baba *et al.*, 1986: 165, 287 (part), fig. 116 (Kyushu-Palau Ridge, 520–1320 m). — Miyake, 1991: 144, pl. 48: fig. 3 (Kyushu-Palau Ridge, 520 m).

Eumunida (Eumunida) depressa de Saint Laurent & Poupin, 1996: 356, figs. 3a–h (type locality: Kyushu-Palau Ridge, 520–1320 m [holotype, ♂, MNHN Ga 3558]).

***Eumunida dofleini* Gordon, 1930**

Eumunida smithii: Balss, 1913b: 21 (part) (Sagami Bay) (not *Eumunida smithii* Henderson, 1885). — Parisi, 1917: 6 (Sagami Bay).

Eumunida dofleini Gordon, 1930: 750, figs. 11a, 12a (type locality: Sagami Bay, Japan [holotype, ov. ♀, ZSM No 1113]). — Baba, 1981b: 112, fig. 1 (Izu Shoto, Japan, 425–870 m). — Baba in Baba *et al.*, 1986: 165, 287, fig. 115 (Kyushu-Palau Ridge and Okinawa Trough, 680–1320 m).

Eumunida (Eumunidopsis) dofleini: de Saint Laurent & Poupin, 1996: 371, fig. 12d (Sagami Bay, Japan [material examined by Balss (1913b) and Parisi (1917)]).

Systematic status not yet resolved:

Eumunida dofleini: Miyake in Miyake & Nakazawa, 1947: 735, fig. 2126. — Miyake, 1965: 634, fig. 1041.

***Eumunida funambulus* Gordon, 1930**

Eumunida funambulus Gordon, 1930: 744, figs. 1c, 2a,

2b, 3b, 4b, 5 (Gulf of Aden, Philippines, Sahul Bank S of Timor, Socotra Channel between Aden and Bombay, and Madura Strait, Java, 70–400 fm (128–730 m); type locality: Gulf of Aden, 12°45'N, 45°17'E, 260 fm (476 m) [holotype, ♀, BMNH 1924.2.4.1]). — van Dam, 1933: 10 (no record). — van Dam, 1937: 102 (Kwandang Bay, N. Celebes, 376 m). — Baba, 1973: 121, fig. 3, pl. 4: fig. 2 (E coast of Kyushu, Japan, 130–150 m); 1988: 6 (off N Mindanao, between Cebu and Bohol, South China Sea off SW Luzon, 209–309 m); this paper (between Luzon and Samar, 92–183 m). — Wu *et al.*, 1997: 79, figs. 4, 12A (Taiwan).

Eumunida (Eumunida) funambulus: de Saint Laurent & Poupin, 1996: 350 (reexamination of type material).

Not *Eumunida funambulus*: Miyake, 1982: 444, pl. 48, fig. 3 (= *E. depressa* de Saint Laurent & Poupin, 1996).

[*Eumunida gordonae* Baba, 1976]

Eumunida gordonae Baba, 1976: 15, fig. 1 (type locality: Tori-shima, Japan, 180 m [holotype, ♀, NSMT-Cr. 4983]).

Eumunida (Eumunidopsis) gordonae: de Saint Laurent & Poupin, 1996: 373 (no record).

***Eumunida karubar* de Saint Laurent & Poupin, 1996**

Eumunida karubar de Saint Laurent & Poupin, 1996: 379, figs. 9b–f, 10b (type locality: Kei Islands, 5°18'S, 133°01'E, 205–212 m [holotype, ♀, MNHN Ga 3500]).

***Eumunida keijii* de Saint Laurent & Macpherson, 1990**

Eumunida keijii de Saint Laurent & Macpherson, 1990a: 240, figs. 4a–b, 5a–i (New Caledonia, 490–550 m; type locality: 18°51.3'S, 163°21'E, 550 m [holotype, ov. ♀, MNHN Ga 1778]). — Poupin, 1996: 24, 25 (fig. h) (Tuamotu Archipelago, 460 m).

Eumunida (Eumunida) keijii de Saint Laurent & Poupin, 1996: 359 (New Caledonia (reexamination of type material), Wallis Island, and French Polynesia, 420–460 m).

***Eumunida laevimana* Gordon, 1930**

Eumunida laevimana Gordon, 1930: 751, figs. 11b, 12 b–c (W of Roti and S of Nicobar Islands, 350–560 fm (640–1025 m); type locality: W of Roti, 11°5'S, 121°30'E, 400 fm (732 m) [holotype, ♀, BMNH 1916.6.19.1-5]).

Eumunida (Pareumunida) laevimana: de Saint Laurent & Poupin, 1996: 366, figs. 6a–b, 12b (reexamination of holotype; Arafura Sea and Savu Sea, between 620–666 m and 730 m).

***Eumunida macphersoni* de Saint Laurent & Poupin, 1996**

? Eumunida smithii: Balss, 1913b: 21 (part), fig. 17 (Japan).

? Eumunida sp. Gordon, 1930: 748, fig. 8a–b (Japan; No. 114 reported by Balss (1913b)).

Eumunida pacifica: Baba in Baba *et al.*, 1986: 165, 287 (part) (Kyushu-Palau Ridge, 520–1320 m [not fig. 116 = *E. depressa* de Saint Laurent & Poupin, 1996]).

Eumunida (Eumunida) macphersoni de Saint Laurent & Poupin, 1996: 362, fig. 5a–g (type locality: Kyushu-Palau Ridge, 520–1320 m [holotype, ov. ♀, MNHN Ga 3559]).

***Eumunida marginata* de Saint Laurent & Macpherson, 1990**

Eumunida marginata de Saint Laurent & Macpherson, 1990a: 267, figs. 12d, 14a–g (New Caledonia, 180–330 m; type locality: 21°30.72'S, 166°21.72'E, 335–330 m [holotype, ♀, MNHN Ga 1777]).

Eumunida (Eumunidopsis) marginata: de Saint Laurent & Poupin, 1996: 373 (no record).

***Eumunida minor* de Saint Laurent & Macpherson, 1990**

Eumunida minor de Saint Laurent & Macpherson, 1990a: 263, figs. 2b–c, 13a, c–e, g, i–l (New Caledonia, 230–275 m; type locality: 20°42.10'S, 167°00.40'E, 270 m [holotype, ♂, MNHN Ga 1863]). — Baba, 1990: 928 (Madagascar, 250 m).

Eumunida (Eumunidopsis) minor: de Saint Laurent & Poupin, 1996: 374 (New Caledonia, Loyalty Islands, Vanuatu, and Bikini Atoll, between 230 m and 250–315 m).

***Eumunida multilineata* de Saint Laurent & Poupin, 1996**

Eumunida (Eumunida) multilineata de Saint Laurent & Poupin, 1996: 348, figs. 1a–i, 11a, b (E coast of Australia, 380–522 m; type locality: 23°07'S, 153°19'E, 400 m [holotype, ♀, QM-W 15801]).

***Eumunida pacifica* Gordon, 1930**

Eumunida pacifica Gordon, 1930: 746, figs. 6, 7 (type

locality: off S Timor, 160 fm (293 m) [holotype, ♀, BMNH 1916.3.29.4]). — Baba, 1988: 7, fig. 1. (off S Obi, 602 m); this paper (Manado Bight (N Sulawesi), off N Mindoro, and Japan, 366–525 m). — de Saint Laurent & Macpherson, 1990a: 244, fig. 4a–d (reexamination of type material).

Eumunida (Eumunida) pacifica: de Saint Laurent & Poupin, 1996: 359, figs. 4a–b, 12a (Moluccas S of Obi and Timor, 293–602 m (reexamination of material reported by Gordon (1930) and Baba (1988); Kei Islands, 575–605 m).

Not *Eumunida pacifica*: Baba in Baba *et al.*, 1986: 165, 287 (part), fig. 116 (= *E. depressa* de Saint Laurent & Poupin, 1996).

Eumunida parva de Saint Laurent & Macpherson, 1990

Eumunida parva de Saint Laurent & Macpherson, 1990a: 257, figs. 2a, 11a–k, 12b–c (New Caledonia, 428–545 m; type locality: 18°52'S, 163°21.7'E, 545 m [holotype, ♂, MNHN Ga 1782]).

Eumunida (Eumunidopsis) parva: de Saint Laurent & Poupin, 1996: 376, fig. 9h (reexamination of type material).

Eumunida propior Baba, 1988

See under *E. smithii* Henderson, 1885.

Eumunida similior Baba, 1990

Eumunida similior Baba, 1990: 928, figs. 2, 3 (type locality: Madagascar, 12°50.0'S, 48°09.1'E, 580–585 m [holotype, ♂, MNHN Ga 729]).

Eumunida (Eumunida) similior: de Saint Laurent & Poupin, 1996: 352, fig. 3i (reexamination of type).

Eumunida smithii Henderson, 1885

Eumunida smithii Henderson, 1885: 413 (type locality: off Ki [Kei] Islands, 129 fm (236 m) [holotype, ♂, BMNH 1888:33]); 1888: 169, pl. 5: fig. 5a, b (off Little Ki [Kei] Island, 140 fm (256 m)). — Gordon, 1930: 749 (part), figs. 9a, 10a (holotype from the Kei Islands, 236 m) (not 2 / from Sahul Bank S of Timor = *E. ampliata* de Saint Laurent & Poupin, 1996). — de Saint Laurent & Macpherson, 1990a: 261 (no record).

Eumunida balssi: Van Dam, 1933: 10 (NE of Sulu Islands, S of the Kei Islands, 204–275 m).

Eumunida propior Baba, 1988: 9, fig. 2 (off N Mindanao and South China Sea off SW Luzon, 214–366 m; type locality: off N Mindanao, 8°46'N, 123°32'30"E, 320 m [holotype, ♀, USNM 150333]).

Eumunida (Eumunidopsis) smithii: de Saint Laurent & Poupin, 1996: 376, figs. 9a, g, 1a (Kei Islands, Indonesia, 315–349 m; including reexamination of holotype, and material reported by van Dam (1933) and Baba (1988)).

Not *Eumunida smithii*: Balss, 1913b: 21 (= *E. dofleini* Gordon, 1930 + *E. balssi* Gordon, 1930 + ?*E. macphersoni* de Saint Laurent & Poupin, 1996). — Parisi, 1917: 6 (= *E. dofleini* Gordon, 1930). — Gordon, 1930: 749 (part), fig. 10b, c (= *E. ampliata* de Saint Laurent & Poupin, 1996). — van Dam, 1933: 11 (= *E. ampliata* de Saint Laurent & Poupin, 1996). — Baba, 1988: 12 (fig. 3a–d = ?*E. capillata* de Saint Laurent & Macpherson, 1990; fig. 3e = *E. ampliata* de Saint Laurent & Poupin, 1996).

Systematic status not yet resolved:

Eumunida smithii Yokoya, 1933: 67 (E of Shimoda and S of Goto I., 137–324 m).

Eumunida sternomaculata de Saint Laurent & Macpherson, 1990

Eumunida sternomaculata de Saint Laurent & Macpherson, 1990a: 244, figs. 1a, 6a,b, 7a–k, 16, 17a, c. (New Caledonia, 418–650 m; type locality: 23°40.5'S, 167°45.2'E, 470 m [holotype, ♂, MNHN Ga 1780]).

Eumunida (Eumunida) sternomaculata: de Saint Laurent & Poupin, 1996: 365 (no record).

Eumunida treguieri de Saint Laurent & Poupin, 1996

? *Eumunida picta*: Titgen, 1988: 143 (Hawaii, 365 m).

Eumunida (Eumunida) treguieri de Saint Laurent & Poupin, 1996: 352, figs. 2a–h, 3j, 11c–d (French Polynesia, 560–710 m; type locality: Mururoa Atoll, Tuamotu Archipelago, 21°46.2'S, 138°54.0'W, 600 m [holotype, ♂, MNHN Ga 2360]).

Eumunida treguieri: Poupin, 1996: 26, 27 (fig. a) (Austral Islands and Society Islands, Tuamotu Archipelago, 560–710 m).

Genus _Gastroptychus_ Caullery, 1896

Ptychogaster A. Milne Edwards, 1880: 63 (junior synonym of *Ptychogaster* Pomel, 1847 (Reptilia: Chelonia; fossil).

Gastroptychus Caullery, 1896: 390 (replacement name for *Ptychogaster* A. Milne Edwards, 1880).

Type species of *Ptychogaster* A. Milne Edwards, 1880:

Ptychogaster spinifer A. Milne Edwards, 1880, by monotypy.

Remarks: *Gastroptychus spinirostris* Ahyong & Poore, 2004 is transferred to *Uroptychus* Henderson, 1888, according to the new definition of the genera proposed in the present paper (see above under the systematic account).

Distribution: Sixteen species are known from the Indo-Pacific. Eight of these occur in the western Pacific (including the Hawaiian Islands and vicinity), two of which were originally known from the Bay of Bengal. Only one is solely from the Indian Ocean. Four species are confined to the eastern Pacific. Five species are known from the Southern Ocean, three of which are confined there, and two of which are common to the western Pacific.

Twelve species occur in transitional depths, one of which also inhabits the continental shelf, and four of which go down to the transitional zone. Four species are limited in depths between 700m and 1500 m. The shallowest record 128–146 m is for *G. sternoornatus* (van Dam, 1933), and the deepest 1500 m is for *G. investigatoris* (Alcock & Anderson, 1899).

Key to species from the Indo-Pacific

1. Anterior margin of sternite 3 concave with row of spines. Mxps 3 widely separated 2
– Anterior margin of sternite 3 with median ridge anteriorly produced and sloping down in ventral view. Mxps 3 close to each other . 8
2. P2–4 propodi very short, length at most 1/7 that of carpi 3
– P2–4 propodi much longer than carpi 5
3. Abdomen totally smooth, unarmed ..... *G. brevipropodus* Baba, 1991
– Abdomen covered with spines 4
4. Rostrum without dorsal spine. Abdomen without prominent spines. Antennal acicle absent ..... *G. brachyterus* n. sp.
– Rostrum with dorsal spine. Abdomen with pair of prominent spines on segments 1–4. Antennal acicle small but distinct ..... *G. novaezelandiae* Baba, 1974
5. Gastric region with or without metagastric spine only, other than pair of epigastric spines 6
– Gastric region with numerous spines, other than pair of epigastric spines 7
6. Cardiac spine present. Antennal acicle falling short of end of antennal peduncle ..... *G. paucispina* Baba, 1991
– Cardiac spine absent. Antennal acicle reaching end of antennal peduncle ..... *G. laevis* (Henderson, 1885)
7. Anterolateral corner of carapace rounded and unarmed. Abdominal segment 6 with pair of spines each near lateral extremity of tergite. Mxp 3 carpus with a few extensor marginal spines other than distolateral one [confirmed by examination of 3 syntypes (ZMB 17479)] ..... *G. valdiviae* Balss, 1913
– Anterolateral corner of carapace with small but distinct spine. Abdominal segment 6 unarmed. Mxp 3 carpus with distolateral spine only ..... *G. sternoornatus* van Dam, 1933
8. Abdomen totally covered with spines 9
– Abdomen partly with spines 12
9. Gastric region with numerous spines, including pair of strong epigastric spines, not in hexagonal arrangement ..... *G. cavimurus* Baba, 1977
– Gastric region with strong spines in hexagonal arrangement 10
10. Gastric region without spine in center of hexagonally arranged spines. Mxp 3 propodus spineless ..... *G. hawaiiensis* Baba, 1977
– Gastric region with spine in center of hexagonally arranged spines. Mxp 3 propodus with distinct spines on extensor margin 11
11. Cornea globular and strongly dilated. Abdominal segment 1 with a single row of spines ..... *G. mileedwardsi* (Henderson, 1885)
– Cornea somewhat dilated. Abdominal segment 1 with 2 rows of spines . *G. rogeri* Baba, 2000
12. Carapace with many small spines interspersed among prominent ones. Mid-cervical groove distinctly anterior to midlength of carapace ..... *G. perarmatus* (Haig, 1968)
– Carapace with prominent spines and few interspersed ones. Gastric region with prominent spines in hexagonal arrangement with central spine. Mid-cervical groove about at midlength of carapace 13
13. Abdominal tergites 3–4 with spines at least on lateral extremities near pleura. Sternite 4 without spine between first lateral spines ..... *G. defensa* (Benedict, 1902)
– Abdominal tergites 3–4 spineless. Sternite 4

with 2 anterior spines between first lateral spines 14

14. Pleura of abdominal segment 3 with spines ..... *G. hendersoni* (Alcock & Anderson, 1899)
– Pleura of abdominal segment 3 without spines 15

15. Abdomen thickly covered with fine setae. Antennal acicle lappet-like ..*G. investigatoris* (Alcock & Anderson, 1899)
– Abdomen sparsely setose. Antennal acicle rudimentary ..... *G. iaspis* Baba & Haig, 1990

***Gastroptychus brachyterus* n. sp.**

Gastroptychus brachyterus Baba, this paper (type locality: Kei Islands, 345 m [holotype, ♀, ZMUC CRU-11331]).

***Gastroptychus brevipropodus* Baba, 1991**

Gastroptychus brevipropodus Baba, 1991a: 466, figs. 2–3 (Loyalty Islands Basin and Chesterfield Islands, 435–580 m; type locality: Loyalty Islands Basin, 22°11'S, 167°16'E, 495–515 m [holotype, ov. ♀, MNHN Ga 2074]).

***Gastroptychus cavimurus* Baba, 1977**

Gastroptychus cavimurus Baba, 1977d: 202, figs. 1–3 (off Ecuador and N Peru, 388–500 m, type locality: off N Peru, 3°43'S, 81°07'W, 388 m [holotype, ov. ♀, RMNH Crust. D. 31282]).

Gastroptychus chacei Baba, 1986

Transferred to *Uroptychus* Henderson, 1888.

***Gastroptychus defensus* (Benedict, 1902)**

Ptychogaster defensa Benedict, 1902: 299, fig. 44 (type locality: Galapagos Islands [between Santa Cruz and San Cristobal Islands, 00°29'00"S, 89°54'30"W], 392 fms (717 m) [type, USNM 20563]). — Wicksten, 1989: 315 (list).

Gastroptychus defensa: Baba & Haig, 1990: 856, fig. 3 (reexamination of syntypes).

Not *Gastroptychus defensa*: Zhong & Wang, 1989: 67, fig. 4 (South China Sea, 510 m) (different species, possibly *G. hendersoni* (Alcock & Anderson, 1899)).

***Gastroptychus hawaiiensis* Baba, 1977**

Gastroptychus hawaiiensis Baba, 1977c: 141, figs. 1, 2 (type locality: off Midway Island, 700–800 m [holotype, ♂, SNMT-Cr. 4354]).

***Gastroptychus hendersoni* (Alcock & Anderson, 1899)**

Ptychogaster Hendersoni Alcock & Anderson, 1899a: 23 (type locality: off Travancore coast (Kerala), 430 fm (787 m) [holotype, ♀, ZSIC 2348/10]); 1899b: pl. 45: fig. 2 (no record). — Alcock, 1901: 280 (off Travancore coast [Kerala], 430 fm (787 m)).

Chirostylus hendersoni: Tirmizi, 1964: 389, fig. 3 (South Arabian coast, 1415 m).

Gastroptychus hendersoni: Baba in Baba *et al.*, 1986: 167, 288, fig. 117 (Kyushu-Palau Ridge, 910 m). — Baba, 1988: 14, fig. 4. (off S coast of Minahassa Peninsula, Sulawesi, 1469 m); 1991a: 469 (Loyalty Islands Basin, 760–790 m). — Shane & Poore, 2004: 8 (Tasmania, 1050–1170 m).

Possibly *Gastroptychus defensa*: Zhong & Wang, 1989: 67, fig. 4 (South China Sea, 510 m).

***Gastroptychus iaspis* Baba & Haig, 1990**

Gastroptychus iaspis Baba & Haig, 1990: 854, figs. 1, 2 (off Mexico and California, 600–1189 m; type locality: Jasper seamount off Baja California, 30°25.6'N, 122°43.7'W, 950–840 m [holotype, ov. ♀, AHF 861]).

***Gastroptychus investigatoris* (Alcock & Anderson, 1899)**

Ptychogaster investigatoris Alcock & Anderson, 1899a: 24 (type locality: Andaman Sea, 405 fm (741 m) [holotype, ♀, ZSIC 1378/10]); 1899b: pl. 45: fig. 1 (no record). — Alcock, 1901: 281 (Andaman Sea, 405 fm (741 m)). — Alcock & McArdle, 1902: pl. 58: fig. 4 (no record).

Chirostylus investigatoris: Doflein & Balss, 1913: 132, figs. 1, 2 (W of Sumatra (SE of Nias), 646 m). — Tirmizi, 1964: 386, figs. 1, 2 (Maldives, 914–1463 m).

Gastroptychus investigatoris: Zarenkov & Khodkina, 1981: 86, fig. 3 (Marcus-Necker Rise, 1360–1500 m). — Baba, 1988: 15, fig. 5 (between Cebu and Leyte, and Moluccas off W coast of Halmahera, 479–503 m).

***Gastroptychus laevis* (Henderson, 1885)**

Ptychogaster laevis Henderson, 1885: 418 (type locality: off Little Ki [Kei] Island, 129 fm (236 m) [holotype, BMNH 1888:33]); 1888: 172, pl. 20: fig. 3, 3a, 3b, 3c (Kei Islands, 129 fm (236 m)).

Gastroptychus laevis: Baba, this paper (Kei Islands,

225 m).

***Gastroptychus milneedwardsi* (Henderson, 1885)**

Ptychogaster Milne-Edwardsi Henderson, 1885: 418 (type locality: Straits of Magellan, 400 fm (732 m) [holotype, BMNH 1888:33]).

Ptychogaster milne-edwardsi: Henderson, 1888: 171, pl. 20: figs. 2, 2a, 2b, 2c (Sarmiento Channel, Chile, 400 fm (732 m)).

Chirostylus milneedwardsi: Haig, 1955: 31 (no record). — Wicksten, 1989: 315 (list).

***Gastroptychus novaezelandiae* Baba, 1974**

Gastroptychus novaezelandiae Baba, 1974: 381, figs. 1, 2 (off E coast of South Island, New Zealand, 410–440 m, found in a dorsal groove of pennatulacean *Balticina willemoesii* (Kölliker); type locality: 43°14.5'S, 174°43'W, 440 m [holotype, ♂, ZLKU 15123]).

***Gastroptychus paucispina* Baba, 1991**

Gastroptychus paucispina Baba, 1991a: 469, figs. 4–6, 8b (Chesterfield Islands, New Caledonia, and Loyalty Islands, 430–520 m; type locality: Chesterfield Islands, 22°09.27'S' 159°24.42'E, 430–440 m [holotype, ♂, MNHN Ga 2078]).

***Gastroptychus perarmatus* (Haig, 1968)**

Chirostylus perarmatus Haig, 1968: 272, figs. 1–3 (type locality: N of Anacapa Island, California, 125 fms (229 m) [holotype, ♀, AHF 6138]). — Wicksten, 1989: 315 (list).

***Gastroptychus rogeri* Baba, 2000**

Gastroptychus rogeri Baba, 2000: 246, figs. 1, 2 (Southern Tasmania, 850–1000 m; type locality: Pedra Branca, S. Tasmania, 1000 m [holotype, ♂, TM G3497]). — Shane & Poore, 2004: 8 (New South Wales, between 476–512 m and 801 m).

Gastroptychus spinirostris Ahyong & Poore, 2004
Transferred to *Uroptychus* Henderson, 1888.

***Gastroptychus sternoornatus* (van Dam, 1933)**

Chirostylus sterno-ornatus van Dam, 1933: 15, figs. 21–23 (type locality: Kei Islands, 310 m [holotype, ♀, ITZA De. 101.664]).

Gastroptychus sternoornatus: Baba 1988: 16, fig. 6 (vicinity of Marinduque off SW Luzon, and off SE Mindoro, 265–353 m); 1991a: 473, fig. 7 (Loyalty Islands, 480 m); this paper (Victoria, Australia, between 128–146 m and 366–458 m). — Ahyong & Poore, 2004a: 12 (New South Wales and Victoria, 329–512 m).

***Gastroptychus valdiviae* (Balss, 1913)**

Ptychogaster valdiviae Balss, 1913a: 225 (type locality: SW of Great Nicobar, 296 m [3 syntypes, 1 ♂, 1 ov. ♀, 1 ♀, ZMB 17479]).

Chirostylus valdiviae: Doflein & Balss, 1913: 133, figs. 3, pl. 17: fig. 1 (SW of Great Nicobar, 6°54'N, 93°28'E, 296 m).

Genus *Pseudomunida* Haig, 1979

Pseudomunida Haig, 1979: 89 (gender: feminine).

Type species: *Pseudomunida fragilis* Haig, 1979, by monotypy.

***Pseudomunida fragilis* Haig, 1979**

Pseudomunida fragilis Haig, 1979: 89, figs. 1, 2 (type locality: off Waianae, Oahu, Hawaii, 21°25.4'N, 158°16.78'W, 969–1280 m [holotype, ov. ♀, BMH S7996]). — Baba, this paper (Bonin Islands [Ogasawara Islands], 1370 m).

Genus *Uroptychodes* Baba, 2004

Uroptychodes Baba, 2004: 98 (gender: masculine).

Type species: *Uroptychodes epigaster* Baba, 2004, by original designation.

Distribution: The genus contains 11 species. Most of the species, 10 in number, are restricted to the Western Pacific, and the remaining one occurs in the Southern Ocean (SE Australia). Ten of these are from transitional depths, four of which also occur on the continental shelf, and three of which go down to upper bathyal depths. The deepest record is 1100 m for *U. nowra* (Ahyong & Poore, 2004).

Key to species

1. Carapace covered with denticles or small spines 2
— Carapace dorsally spineless or bearing denticular spines on anterior portion 3
2. Abdominal segments unarmed. Excavated sternum produced forward, reaching end of Mxp 1 basal article . *U. benedicti* (Baba, 1977)
— Abdominal segments 1–2 with small spines. Excavated sternum sharp triangular, terminating in midlength of Mxp 1 basal

article ..... *U. spinulifer* (van Dam, 1940)

3. Rostral lateral margin with row of small spines extending from anterior part on to not all but part of proximal half 4
— Rostral lateral margin smooth at least on proximal half 6
4. Branchial marginal spines of carapace very broad (basal width of largest spine 2/3 length), nearly contiguous to one another at base ..... *U. grandirostris* (Yokoya, 1933)
— Branchial marginal spines of carapace slender (basal width of largest spine distinctly less than half length), separated from one another by their basal width 5
5. Rostrum with tubercular spines on dorsal surface. Antennal scale overreaching end of antennal article 5. P3 propodus with tubercular spines irregularly arranged along extensor margin ..... *U. albatrossae* (Baba, 1988)
— Rostrum without tubercular spines on dorsal surface. Antennal scale reaching at most midlength of antennal article 5. P3 propodus with row of spines on proximal half of extensor margin ..... *U. barunae* Baba, 2004
6. Carapace with distinct spine behind lateral limit of orbit ..... *U. epigaster* Baba, 2004
— Carapace lacking spine behind lateral limit of orbit 7
7. Article 5 of antennal peduncle much longer (1.8 times) than article 4 8
— Article 5 of antennal peduncle as long as article 4 10
8. Branchial margin with 8 small spines (largest spine distinctly less than corneal breadth ..... *U. okutanii* (Baba, 1981)
— Branchial margin with 4 or 5 strong spines (largest spine distinctly more than corneal breadth) 9
9. Branchial margin with 4 strong spines. Rostrum with proximal-most lateral spine situated about at midlength ..... *U. nowra* (Ahyong & Poore, 2004)
— Branchial margin with 5 (rarely 6) strong spines. Rostrum with proximal-most lateral spine situated at distal 1/3 ..... *U. spinimarginatus* (Henderson, 1885)
10. Carapace lateral marginal spines on branchial region distinctly longer than those on anterior region. P2 carpus distinctly longer than propodus ..... *U. mortenseni* (van Dam, 1939)
— Carapace lateral marginal spines on branchial region not distinctly longer than those on branchial region. P2 carpus slightly shorter than propodus ..... *U. musorstomi* Baba, 2004

***Uroptychodes albatrossae* (Baba, 1988)**

Uroptychus albatrossae Baba, 1988: 22, fig. 8 (off N Mindanao, between Negros and Siquijor, between Cebu and Bohol, 265–510 m; type locality: off N Mindanao, 8°47'N, 123°31'15"E, 333 m [holotype, ov. ♀, USNM 150302]).

Uroptychodes albatrossae: Baba, 2004: 100, fig. 1 (Japan (Kii Peninsula) and Indonesia (Tanimbar Island), between 184–186 m and 225–223 m); this paper (Bali Sea and Japan, 73–450 m).

***Uroptychodes barunae* Baba, 2004**

Uroptychus barunae Baba, 2004: 100, figs. 2, 3 (Indonesia (Tanimbar Island), 184–186 m and 206–210 m; type locality: 7°59'S, 133°02'E, 184–186 m [holotype, ov. ♀, MNHN Ga 4167-1]).

***Uroptychodes benedicti* (Baba, 1977)**

Uroptychus benedicti Baba, 1977b: 123, fig. 1 (type locality: off Omae-zaki, Honshu, Japan, 30 m [holotype, ♂, USNM 150307]).

Uroptychodes benedicti: Baba, 2004, 104, fig. 4 (Kei Islands and Tanimbar Islands, Indonesia, 124–850 m).

***Uroptychodes epigaster* Baba, 2004**

Uroptychodes epigaster Baba, 2004: 104, fig. 5 (New Caledonia, between 410–440 m and 680–700; type locality: 22°57.6'S, 167°33.0'E, 410–440 m [holotype, ♀, MNHN Ga 4581]).

***Uroptychodes grandirostris* (Yokoya, 1933)**

Uroptychus grandirostris Yokoya, 1933: 68, fig. 29 (part) (type localities: Japan (S of Nagasaki, SW of Goto, S of Goto, W of Sata-misaki, W of Muroto-zaki, W of Tanabe, W of Shio-misaki), 165–223 m [types no longer extant]). — van Dam, 1939: 403, figs. 4, 4a, 5 (examination of one of the type-series). — Miyake, in Miyake & Nakazawa, 1947: 735, fig. 2125 (no record). — Miyake, 1965: 633, fig. 1038 (no record). — Miyake & Baba, 1967c: 225, fig. 1 (East China Sea, 196 m).

Uroptychodes grandirostris: Baba, 2004: 106, fig. 6 (off Daio-zaki and Tosa Bay, Japan, and East China Sea, depth not recorded [selection of neotype, ♂, ZLKU 4879]).

***Uroptychodes mortenseni* (van Dam, 1939)**

Uroptychus mortenseni van Dam, 1939: 398, figs. 3, 3a (type localities: Kei Islands and Menado [Manado] Bight, 250–352 m [syntypes, ZMC]). — Baba, 1988: 38 (South China Sea off SW Luzon, 366 m [designation of lectotype: ov. ♀, Kei Islands, 5°46'S, 132°49'35"E, 352 m, ZMUC]).

Uroptychodes mortenseni: Baba, 2004, 109, fig. 7 (Kei Islands, 296–299 m); this paper (off Zamboanga, 293–366 m).

***Uroptychodes musorstomi* Baba, 2004**

Uroptychodes musorstomi Baba, 2004: 110, fig. 8 (SE New Caledonia, between 335 m and 314–364 m; type locality: 21°43'S, 166°37'E, 314–364 m [holotype, ♀, MNHN Ga 4313]).

***Uroptychodes nowra* (Ahyong & Poore, 2004)**

Uroptychus nowra Ahyong & Poore, 2004a: 63, fig. 18 (type locality: off Nowra, New South Wales, 35°00.00'S, 151°16.30'E, 1100 m [holotype, ♀, NMV J17064]).

Uroptychodes nowra: Baba, this paper (new combination).

***Uroptychodes okutanii* (Baba, 1981)**

Uroptychus okutanii Baba, 1981b: 113, figs. 2, 3 (off E coast of Hachijo-jima, Japan, 455–510 m; type locality: 33°00.5'N, 140°03.5'E, 510 m [holotype, ♂, NSMT-Cr. 6170]).

Uroptychodes okutanii: Baba, 2004: 112, fig. 9a (reexamination of holotype).

***Uroptychodes spinimarginatus* (Henderson, 1885)**

Diptychus spinimarginatus Henderson, 1885: 419 (type localities: off Kermadec Islands and off the Philippines, 500–520 fm (915–952 m) [syntypes, BMNH 1888:33]).

Uroptychus spinimarginatus: Henderson, 1888: 176, pl. 21: figs. 2, 2a (off Kermadec Islands, and off Meangis Islands S of Philippines [= Kepulauan Talaud S of Mindanao], 500–520 fm (915–952 m)). — Thomson, 1899: 196 (list). — Baba, 1988: 46, figs. 18, 19. (Palawan Passage, 686 m [designation of lectotype: ov. ♀, BMNH 1888:33, Kermadec Islands, 520 fm (952 m)]).

Uroptychodes spinimarginatus: Baba, 2004: 112, fig. 9b, c (Hunter and Matthew Islands, and Kei Islands, between 605–576 m and 751–755 m); this paper (Manado Bight, N Sulawesi, 458 m).

***Uroptychodes spinulifer* (van Dam, 1940)**

Uroptychus spinulifer van Dam, 1940: 100, fig. 3 (type locality: Java Sea, 5°39' S, 111°19' E, 68–71 m [holotype, ♀, ZMA De. 101.669]). — Baba, 1988: 48, fig. 20 (Moluccas off S coast of Halmahera, 240 m).

Uroptychodes spinulifer: Baba, 2004: 113, fig. 10 (Kei Islands, 315–349 m).

Genus *Uroptychus* Henderson, 1888

Diptychus A. Milne Edwards, 1880: 61 (junior synonym of *Diptychus* Seindachner, 1866) (Pisces)).

Uroptychus Henderson, 1888: 173 (gender: feminine) (replacement name for *Diptychus* A. Milne Edwards, 1880).

Type species of *Diptychus* A. Milne Edwards, 1880: not designated.

Distribution: Other than *U. gracilimanus bidentatus* Doflein & Balss, 1913, the identity of which remains uncertain, 104 species are known from the Indo-Pacific, including a species of worldwide distribution. Fifty-five of these are from the western Pacific, five of which are also known in the Indian Ocean, three of which occur widely in the Indian and Southern Oceans, and two of which occur in the Southern Ocean. Twenty-four species have been recorded solely from the Indian Ocean, and 21 in the Southern Ocean. Three species are confined to the eastern Pacific.

Fifty-four of the Indo-Pacific species are known in transitional depths (200–700 m), 11 of which also occur on the continental shelf, and five of which go down to upper bathyal depths. Thirty-nine species occur between 700 and 1500 m. Eight species have been recorded from lower bathyal depths below 1500 m, two of which widely ranges from lower bathyal depths to the continental shelf. The reliable deepest record is for *U. bicavus* Baba & de Saint Laurent, 1992 taken in 2750 m. The "John Murray" material of *U. cavirostris* Alcock & Anderson, 1899 was recorded from 4229 m (Tirmizi, 1966). However, its identity remains questionable (see above under the "Remarks" of *U. latirostris* Yokoya, 1933).

Three species have been recorded from active hydrothermal vent systems in the North Fiji Basin and Bismarck Archipelago, in 1492–2750 m (Baba & Türkay, 1992; Baba & de Saint Laurent, 1992; Baba & Williams, 1998).

Recently Ahyong and Poore (2004a) described 20 new species from southeastern Australia, one of which is transferred to *Uroptychodes* Baba, 2004. In addition, about 40 new species are being described from New Caledonia and vicinity (Baba, unpublished). The genus is, thus, apparently more diverse than expected from previous studies. The key to Indo-West Pacific deep-sea species provided below is provisional and will be revised in the near future.

Key to species from the Indo-West Pacific including southern Ocean

1. Carapace lateral margin without distinct spine, other than anterolateral spine where present . 2
– Carapace lateral margin with distinct spine(s), other than anterolateral spine 44
2. Epigastric spines or tubercles on dorsal surface of carapace 3
– No spine on dorsal surface of carapace 8
3. Carapace dorsally granulose 4
– Carapace dorsally smooth 5
4. P2–4 propodi having flexor margin with terminal spine very remote from distal second; dactyli having strong terminal and smaller subterminal spines distinctly distant from groups of very small, inclined spines on proximal third of flexor margin (confirmed by examination of male and female syntypes, BMNH 1966.2.3.21-22) ..... *U. sternospinosus* Tirmizi, 1964
– P2–4 propodi having flexor margin with row of regularly arranged spines; dactyli having flexor margin with row of spines diminishing toward proximal end of article ..... *U. soyomaruae* Baba, 1981
5. P2–4 dactyli with flexor marginal spines (other than distal 2) strongly inclined, nearly contiguous to flexor margin [Type material includes three species (Baba, unpublished; see Davie (2002: 31); one of three syntypes (1 ♂, 1 ov. ♀, 1 ♀, BMNH 1888:33) from Challenger St. 164 is selected as a lectotype)] ..... *U. australis* (Henderson, 1885)
– P2–4 dactylus with flexor marginal spines not contiguous to flexor margin 6
6. Sternite 4 rounded on anterolateral corner. Antennal scale barely reaching midlength of antennal article 5. P2 propodus slightly longer than carpus ..... *U. bicavus* Baba & de Saint Laurent, 1992
– Sternite 4 with distinct process on anterolateral corner. Antennal scale overreaching end of antennal article 5. P2 propodus almost twice as long as carpus 7
7. Antennal article 2 with sharp spine on distolateral margin. P1 basi-ischium with curved dorsal spine; merus with tubercles on ventral surface ..... *U. litosus* Ahyong & Poore, 2004
– Antennal article 2 with very small distolateral spine. P1 basi-ischium with short flattened spine (as long as broad); merus, carpus and palm granular on ventral surface ..... *U. sagamiae* n. sp.
8. P2–4 propodi entire on flexor margin 9
– P2–4 propodi with spines on flexor margin. 14
9. Rostrum short, at most slightly overreaching end of ocular peduncle. Anterior margin of sternite 3 widely and shallowly excavated ..... *U. scambus* Benedict, 1902
– Rostrum long triangular, extending far beyond ocular peduncle. Anterior margin of sternite 3 deeply excavated 10
10. P2–4 dactyli gently curving, flexor margin with a number of spines (ca. 6) (confirmed by examination of holotype, BMNH 1966.2.3.17-18) ..... *U. gordonae* Tirmizi, 1964
– P2–4 dactyli strongly curving, flexor margin with numerous spines (more than 17) 11
11. Lateral orbital angle rounded 12
– Lateral orbital angle angular 13
12. P2–4 dactyli with flexor marginal spines slender and longer than broad, ultimate spine larger than penultimate ..... *U. longvae* Ahyong & Poore, 2004
– P2–4 dactyli with flexor marginal spines short and about as long as broad, ultimate spine somewhat smaller than penultimate ..... *U. patulus* Ahyong & Poore, 2004
13. P1 fingers directed anterolaterad. P2–4 propodi curving on flexor margin; dactylus more than 3/4 as long as propodus (confirmed by examination of holotype, BMNH 1966.2.3.41) *U. onychodactylus* Tirmizi, 1964
– P1 fingers directed straight forward. P2–4 propodi nearly straight on flexor margin, dactylus 2/3 as long as propodus ..... *U. setosidigitalis* Baba, 1977
14. P2–4 propodi with 2 spines only on middle portion of flexor margin

..... *U. bispinatus* Baba, 1988

– P2–4 propodi with spines restricted to distal portion of flexor margin or arranged regularly along large part of flexor margin 15

15. Flexor margin of P2–4 propodi with pair of distal spines at most preceded by 1 spine 16

– Flexor margin of P2–4 propodi with row of spines, distal-most spine single or paired with another spine placed mesially 24

16. P2–4 dactyli with 2 terminal spines only ..... U. *pilosus* Baba, 1981

– P2–4 dactyli with row of spines 17

17. P2–3 merus denticulate at least on proximal half of dorsal crest; dactylus having penultimate of flexor marginal spines extremely strong ..... *U. paenultimus* n. sp.

– P2–3 merus smooth on dorsal crest; dactylus having penultimate one of flexor marginal spines broader, somewhat longer than remainder 18

18. Flexor margin of P2–4 dactylus bearing more than 10 spines close to one another 19

– Flexor margin of P2–4 dactylus bearing 6–7 loosely arranged spines 20

19. Antennal scale distinctly overreaching end of antennal article 5. Mxp 3 merus smooth on flexor margin ..... *U. babai* Ahyong & Poore, 2004

– Antennal scale slightly overreaching midlength of antennal article 5. Mxp 3 merus with blunt process distal to midlength of flexor margin ..... *U. brevipes* Baba, 1990

20. Carapace with squamous pitting on dorsal surface [characters of the type material informed by K. K. Tiwari, personal comm.] ..... *U. bacillimanus* Alcock & Anderson, 1899

– Carapace with smooth dorsal surface, with or without fine setae 21

21. Mxp 3 merus spineless 22

– Mxp 3 merus with spines on flexor margin and distolateral end 23

22. P2–4 dactyli narrow relative to length, more than half length of propodus, flexor margin with ultimate and penultimate spines subequal ..... *U. glaber* Baba, 1981

– P2–4 dactyli broad relative to length, less than half length of propodus, flexor margin with ultimate spine smaller than penultimate, subequal to antepenultimate ..... *U. tomentosus* Baba, 1974

23. Rostrum narrow triangular, anterolateral spine of carapace prominent, produced straight forward. P2–4 propodi with pair of terminal spines only, dactylus with penultimate spine subequal to antepenultimate ..... *U. amabilis* Baba, 1977

– Rostrum broad triangular, anterolateral spine of carapace small. P2–4 propodi with pair of terminal spines preceded by 1 extra spine, dactylus having penultimate spine prominent, pronouncedly larger than antepenultimate (confirmed by examination of syntypes, ZMA De. 101.693) ..... *U. suluensis* van Dam, 1933

24. Rostrum short, broad, equilateral triangular ..... *U. brevirostris* van Dam, 1933

– Rostrum narrow triangular 25

25. P2–4 propodi with convex flexor distal margin 26

– P2–4 propodi without convex flexor distal margin 27

26. Carapace lateral margin serrate. P2–4 meri with spines on dorsal crest ..... *U. hesperius* Ahyong & Poore, 2004

– Carapace lateral margin not serrate. P2–4 meri unarmed on dorsal crest ..... *U. edisonicus* Baba & Williams, 1998

27. Carapace granulose on dorsal surface (confirmed by examination of holotype, BMNH1917.1.29.116) ..... *U. maori* Borradaile, 1916

– Carapace smooth on dorsal surface 28

28. P2 dactylus with 2 distal spines remotely separated from proximal group of spines ... 29

– P2 dactylus with regularly arranged row of spines (distal third often more distant from second than from fourth, but not distantly as in above) 31

29. Flexor marginal spines of P2–4 propodi equidistant ..... *U. remotispinatus* Baba & Tirmizi, 1979

– Flexor marginal spines of P2–4 propodi not equidistant, distal-most remotely separated from distal second 30

30. P2–4 having distal-most of propodal flexor marginal spines located at juncture with dactylus; dactylus with 2 distal spines separated from each other, proximal group of spines very small, only discernible under high magnification ... *U. thermalis* Baba & de Saint Laurent, 1992

– P2–4 having distal-most of propodal flexor marginal spines somewhat but distinctly

proximal to juncture with dactylus; dactylus with 2 distal spines close to each other, proximal group of spines distinct ..... *U. vandamae* Baba, 1988

31. P2–4 propodi with a single terminal spine preceded by row of spines 32
– P2–4 propodi with pair of terminal spines preceded by row of spines 33
32. Anterolateral spine of carapace stout. Antennal article 2 strongly produced at distolateral margin; antennal scale more than 1.5 times as broad as opposite antennal peduncle. P2–4 dactyli with very small, inclined spines on flexor margin .. *U. brevisquamatus* Baba, 1988
– Anterolateral spine of carapace small. Antennal article 2 with small spine at distolateral margin; antennal scale equally broad as or slightly wider than opposite antennal peduncle. P2–4 dactyli with relatively broad, somewhat inclined spines on flexor margin ..... *U. gracilimanus* (Henderson, 1885)
33. P2–4 dactyli with small, inclined spines on flexor margin ..... *U. setosipes* Baba, 1981
– P2–4 dactyli with sharp triangular spines on flexor margin 34
34. Corneal width distinctly less than half length of ocular peduncle. P2–4 dactyli with fringe of plumose setae along median 3/4 of extensor margin ..... *U. brucei* Baba, 1986
– Corneal width distinctly more than half length of ocular peduncle. P2–4 dactyli without fringe of plumose setae along extensor margin 35
35. Anterior margin of sternite 3 without pair of submedian spines. Antennal articles 4–5 each with distal spine 36
– Anterior margin of sternite 3 with pair of submedian spines. Antennal articles 4–5 unarmed 37
36. Antennal article 2 lacking spine ..... *U. laperousazi* Ahyong & Poore, 2004
– Antennal article 2 with small spine ..... *U. latus* Ahyong & Poore, 2004

[The differences between the two species are so slight that they are probably identical. The presence or absence of the small (not large) spine at the antennal article 2 tends to be variable in species of *Uroptychus*. The rounded rostral apex as in *U. latus*, another character to separate it from *U. laperousazi*, may be due to damage, such a case having been observed in *U. occultispinatus* from the Philippines as well as in a new species from New Caledonia (Baba, unpublished)]

37. Sternite 4 with strongly produced anterolateral process reaching level of anterior end of sternite 3 ..... *U. acostalis* Baba, 1988
– Sternite 4 with anterolateral angle not reaching anterior end of sternite 3 38
38. Sternite 4 tuberculate on ventral surface 39
– Sternite 4 smooth on ventral surface other than feebly tuberculate transverse ridge 40
39. Carapace sparsely tuberculate on dorsal surface, with distinct ridge along posterior part of lateral margin ..... *U. comptus* Baba, 198
– Carapace nearly smooth except for irregular tubercles behind ocular peduncles, without ridge along posterior part of lateral margin ..... *U. empheres* Ahyong & Poore, 2004
40. Sternite 3 posteriorly delimited by weakly convex depression ..... *U. politus* (Henderson, 1885)
– Sternite 3 posteriorly delimited by strongly convex depression 41
41. Carapace lateral margin with irregular tubercles. Antennal scale reaching end of antennal article 5 ..... *U. litosus* Ahyong & Poore, 2004
– Carapace lateral margin smooth. Antennal scale falling short of end of antennal article 5 42
42. Anterolateral angle of carapace somewhat posterior to level of lateral orbital angle ..... *U. nitidus* (A. Milne Edwards, 1880)
– Anterolateral angle of carapace directly lateral to level of lateral orbital angle 43
43. Anterolateral angle of carapace not sharp spiniform but angular. Sternite 4 without prominent process at anterolateral corner ..... *U. similis* Baba, 1977
– Anterolateral angle of carapace with distinct spine. Sternite 4 with distinct process on anterolateral corner (confirmed by examination of ov. ♀, ZSIC 9328/9) ..... *U. indicus* Alcock, 1901
44. Carapace unarmed on dorsal surface 45
– Carapace armed with spines on dorsal surface 79
45. Carapace lateral margin with at most 1–2 spines or processes other than anterolateral spine 46

– Carapace lateral margin with more than 3 distinct spines other than anterolateral spine 59

46. Carapace with only 1 spine or process at midlength of lateral margin 47

– Carapace with 1–2 spines on anterior part of branchial region 48

47. Carapace with prominent midlateral spine, anterolateral spine strongly produced. Antennal flagellum slightly more than half length of rostrum ..... *U. raymondi* Baba, 2000

– Carapace with midlateral process not spiniform, anterolateral corner angular, not produced. Antennal flagellum twice length of rostrum ..... *U. valdiviae* Balss, 1913

48. P2–4 dactyli with row of inclined, slender spines very close to one another ..... *U. alius* n. sp.

– P2–4 dactyli with row of somewhat inclined, sharp triangular spines moderately or rather widely interspaced one another 49

49. Carapace covered with granulate short ridges. P2–4 propodi expanded on distal portion of flexor margin ..... *U. brachydactylus* Tirmizi, 1964

– Carapace smooth on dorsal surface. P2–4 propodi not expanded on flexor margin 50

50. Rostrum very short, far falling short of end of ocular peduncle ..... *U. simiae* Kensley, 1977

– Rostrum slightly or largely overreaching or slightly falling short of end of ocular peduncle 51

51. Rostrum broad triangular (at least about as long as broad) 52

– Rostrum narrow triangular (distinctly longer than broad) 56

52. Sternite 3 without pair of submedian spines on anterior margin 53

– Sternite 3 with pair of submedian spines on anterior margin 54

53. Carapace with tubercles behind each ocular peduncle. P1 smooth on dorsal and ventral surface ..... *U. mauritius* n. sp.

– Carapace without tubercles behind each ocular peduncle. P1 with tubercles at least on ventral surface of merus, carpus and palm ..... *U. alcocki* Ahyong & Poore, 2004

54. P1 granular at least on ventral surface of merus, carpus and palm; merus narrowed distally and proximally, representing shape of bowling pin. Posterior lobe of telson relatively long, about as long as broad ..... *U. yokoyai* Ahyong & Poore, 2004

– P1 nearly smooth except for squamous granules on ventral proximal part of merus; merus not narrowed distally, lateral and mesial margins subparallel on distal half. Posterior lobe of telson at most half as long as broad. 55

55. Telson distinctly emarginate on posterior margin ..... *U. cavirostris* Alcock & Anderson, 1899

– Telson semicircular or slightly convex on posterior margin ... *U. latirostris* Yokoya, 1933

56. P2–4 propodi with pair of terminal spines only on ventral margin ..... *U. joloensis* van Dam, 1939

– P2–4 propodi with row of spines on ventral margin 57

57. Anterior margin of sternite 3 shallowly concave with V-shaped median notch, no submedian spines. Cornea less than 1/5 length of remaining eyestalk. Anntenal article 4 with strong distal spine ..... *U. novaezealandiae* Borradaile, 1916

– Anterior margin of sternite 3 deeply concave with pair of submedian spines. Cornea at most slightly less than half length of remaining eyestalk. Antennal article 4 unarmed 58

58. Postorbital carapace length subequal to width of carapace. Submedian spines of anterior margin of sternite 3 separated by U-shaped notch. Mxp 3 merus unarmed ..... *U. sibogae* van Dam, 1933

– Postorbital carapace length distinctly smaller than width of carapace. Submedian spines of anterior margin of sternite 3 nearly contiguous at base. Mxp 3 merus with distolateral spine ..... *U. flindersi* Ahyong & Poore, 2004

59. Carapace very granulose on whole dorsal surface ..... *U. naso* van Dam, 1933

– Carapace smooth or at most feebly granulose on anterior half of dorsal surface 60

60. P2–4 propodi with marked projection on flexor distal margin 61

– P2–4 propodi without marked projection on flexor margin 63

61. P2–4 meri unarmed on dorsal crest 62

— P2–4 meri armed with spines at least on proximal portion of dorsal crest ..... *U. hamatus* Khodkina, 1981

62. Sternite 3 without median notch on anterior margin. Sternite 4 not serrate on lateral margin.

P1 fingers directed anterolaterad (confirmed by examination of holotype, ZMA De. 101.666) ..... *U. xipholepis* van Dam, 1933

– Sternite 3 with V-shaped median notch on anterior margin. Sternite 4 serrate on lateral margin. P1 fingers directed straight forward ..... *U. subsolanus* Ahyong & Poore, 2004

63. P2–4 dactyli having penultimate spine extremely broader than (more than 3 times as broad as) ultimate 64

– P2–4 dactyli having penultimate spine smaller or somewhat larger than, or subequal to ultimate spine 74

64. P2–4 dactyli with loosely arranged flexor marginal spines 65

– P2–4 dactyli with closely arranged (nearly contiguous to one another) flexor marginal spines 71

65. Penultimate spine of P2–4 dactyli much broader than antepenultimate 66

– Penultimate spine of P2–4 dactyli nearly as large as or slightly larger than antepenultimate 67

66. Anterolateral spine of carapace closely lateral and posterior to lateral orbital spine. Second and fifth of carapace lateral marginal spines largest .. *U. longicheles* Ahyong & Poore, 2004

– Anterolateral spine of carapace remote from lateral orbital spine, both placed at same level. Second and fifth carapace lateral marginal spines smaller than third ..... *U. belos* Ahyong & Poore, 2004

67. Carapace lateral margin with 2 small spines between anterolateral spine and spine at anterior end of branchial margin 68

– Carapace lateral margin without spine between anterolateral spine and spine at anterior end of branchial margin 70

68. Carapace lateral margin with 2 strong spines on anterior branchial region (no spine behind midlength) ..... *U. zezuensis* Kim, 1972

– Carapace lateral margin with 4 spines on branchial region (2 spines behind midlength) 69

69. P2–4 dactyli with 8 somewhat inclined spines on flexor margin ..... *U. inclinis* n. sp.

– P2–4 dactyli with 6 flexor marginal spines, distal third, fourth, fifth spines perpendicular to flexor margin ..... *U. tridentatus* (Henderson, 1885)

70. Carapace with anterolateral (first) spine much stronger than other spines on lateral margin. Antennal scale overreaching antennal peduncle by length of antennal article 5 ..... *U. crassior* Baba, 1990

– Carapace with anterolateral (first) spine subequal to or smaller than second. Antennal scale barely reaching end of antennal article 5 ..... *U. convexus* Baba, 1988

71. P2–4 propodi having flexor margin with pair of terminal spines preceded by row of more than 5 spines ..... *U. levicrustus* Baba, 1988

– P2–4 propodi having flexor margin with pair of terminal spines only or preceded by another 1 or 2 spines 72

72. P2–4 meri armed with spines on dorsal crest. Antennal peduncle having very small spine on each of distal 2 articles, antennal scale falling short of end of antennal peduncle ..... *U. pronus* n. sp.

– P2–4 meri unarmed on dorsal crest. Antennal peduncle with strong spine on each of distal 2 articles, antennal scale fully reaching end of antennal peduncle 73

73. Rostrum with subterminal spine on each side. Lateral spines of carapace strong and acute on branchial region. Anterior margin of sternite 3 with median notch separating submedian spines ..... *U. crassipes* van Dam, 1939

– Rostrum unarmed on lateral margin. Lateral spines of carapace posteriorly diminishing. Anterior margin of sternite 3 with widely V-shaped, without median notch and submedian spines ..... *U. occultispinatus* Baba, 1988

74. Anterior margin of sternite 3 widely V-shaped, without median notch 75

– Anterior margin of sternite 3 convex with median notch with or without submedian spines 76

75. P2–4 dactyli with sharp, strong, somewhat inclined spines on flexor margin ..... *U. foulisii* Kensley, 1977

– P2–4 dactyli with small spines nearly perpendicular to flexor margin ..... *U. crosnieri* Baba, 1990

76. P2–4 propodi ending in a single spine on flexor margin (confirmed by examination of holotype, BMNH 1966.2.3.19) ..... *U. murrayi* Tirmizi, 1964

– P2–4 propodi ending in pair of terminal spines on flexor margin 77

77. P2–4 propodi with row of spines; ultimate one of flexor marginal spines on dactylus smaller than penultimate ..... *U. multispinosus* Ahyong & Poore, 2004
– P2–4 propodi with pair of terminal spines only or preceded by 1 or 2 additional spines; distal 2 spines of flexor marginal spines on dactylus distinctly larger than remainder (ultimate somewhat smaller) 78
78. P2–4 dactyli having 2 distal spines preceded by 6 inclined, slender spines on flexor margin. Article 5 of antennal peduncle 3.5 times as long as broad, with strong distal spine; antennal scale reaching end of article 5 ..... *U. wolffi* n. sp.
– P2–4 dactyli having 2 distal spines preceded by 3 inclined slender spines. Article 5 of antennal peduncle 2.5 times as long gas broad, unarmed; antennal scale barely reaching end of article 5 ..... *U. altus* n. sp.
79. P2–4 dactyli truncate distally ..... *U. scandens* Benedict, 1902
– P2–4 dactyli tapering distally 80
80. Carapace with dorsal spines distributed on entire surface 81
– Carapace with dorsal spines restricted to anterior part of carapace 86
81. P1 palm with rows of spines continued from merus and carpus 82
– P1 palm smooth 85
82. Abdominal segments unarmed ..... *U. spinimanus* Tirmizi, 1964
– Abdominal segment armed with spines 83
83. Excavated anterior margin of sternite 3 without median notch. P2–4 propodi strongly expanded on flexor distal margin ..... *U. chacei* (Baba, 1986)
– Excavated anterior margin of sternite 3 with median notch separating small submedian spines. P2–4 propodi not strongly expanded on flexor distal margin 84
84. Rostrum with 2 prominent lateral spines on each side. Antennal scale slightly overreaching end of antennal article 4. P2–4 dactyli more than half length of propodi ..... *U. spinirostris* Ahyong & Poore, 2004
– Rostrum with several small lateral spines on each side. Antennal acicle slightly falling short of end of article 5. P2–4 dactyli about 1/3 length of propodi ..... *U. ciliatus* (van Dam, 1933)
85. P2–4 with spines on dorsal crests of merus and carpus. Antennal scale overreaching end of antennal peduncle ..... *U. sexspinosus* Balss, 1913
– P2–4 unarmed on merus and carpus. Antennal scale terminating in end of antennal peduncle ..... *U. fusimanus* Alcock & Anderson, 1899
86. P2–4 dactyli with row of flexor marginal spines gradually increasing in size toward apex 87
– P2–4 dactyli with penultimate flexor marginal spine prominent, preceded by inclined, slender spines 94
87. P2–4 propodi with rounded projection on flexor distal margin 88
– P2–4 propodi without rounded projection on flexor distal margin 90
88. Carapace lateral spine directly behind indistinct cervical groove successively followed by row of distinct spines ..... *U. zeidleri* Ahyong & Poore, 2004
– Carapace lateral spine directly behind indistinct cervical groove rather distantly separated from posterior branchial marginal spines apparently diminishing posteriorly ... 89
89. Anterior margin of sternite 3 deeply concave, representing broad V-shape. Antennal peduncle with distal spine on each of articles 4–5 ..... *U. insignis* (Henderson, 1885)
– Anterior margin of sternite 3 deeply concave with U-shaped median notch. Antennal peduncle unarmed on articles 4–5 ..... *U. ensirostris* Parisi, 1917

[Differences between *U. ensirostris* Parisi, 1917 and *U. insignis* Henderson, 1885) are very slight. The only difference between the two that can be led by previous descriptions and illustrations (Henderson, 1885, 1888; Parisi, 1917; Froglia, 1987) is the relative length of the antennal flagellum: it extends far forward as the end of P1 carpus in *U. insignis* (see Henderson, 1888: pl. 21, fig. 1), whereas it slightly overreaches the end of P1 merus in *U. ensirostris* (see Parisi, 1917: fig. 1). Two specimens (1 ♂ 18.0 mm, 1 ♀ 8.9 mm, MNHN) at hand from the Crozet Islands referable to *U. insignis* bear 16-segmented flagella that overreach the end of but not the midlength of the P1 carpus].

90. P2–4 propodi with single, unpaired terminal spine ..... *U. nigricapillis* Alcock,1901

– P2–4 propodi with pair of terminal spines 91
91. Carapace with convexly divergent lateral margins. P2–4 armed with spines on dorsal crest of merus ..... *U. triangularis* Miyake & Baba, 1967
– Carapace with subparallel or convex lateral margins. P2–4 unarmed on merus 92
92. Anterior margin of sternite 3 with pair of submedian spines .. *U. longioculus* Baba, 1990
– Anterior margin of sternite 3 without submedian spines 93
93. Antennal scale reaching end of antennal article 5. P1 merus and carpus dorsally with sharp distal spines. P2–4 dactyli with spines nearly perpendicular to flexor margin ..... *U. magnispinatus* Baba, 1977
– Antennal scale terminating in midlength of antennal article 5. P1 merus and carpus lacking distal spines. P2–4 dactyli with spines obliquely inclined along flexor margin ..... *U. calcar* Ahyong & Poore, 2004
94. Anterior margin of sternite 3 without submedian spines 95
– Anterior margin of sternite 3 with pair of submedian spines separated by notch 96
95. Anterior margin of sternite 3 deeply concave representing broad V-shape. Mxp 3 merus and carpus unarmed. Epigastric row of small spines ..... *U. dentatus* Balss, 1913
– Anterior margin of sternite 3 deeply concave, with U-shaped median notch. Field of spines on anterior gastric region ..... *U. cardus* Ahyong & Poore, 2004
96. Sternite 4 produced into prominent spine on anterolateral corner. Flexor marginal spines of P2–4 dactyli closely arranged 97
– Sternite 4 with small spine(s) on anterolateral corner. Flexor marginal spines of P2–4 dactyli loosely arranged 98
97. Antennal scale terminating in end of antennal peduncle. P2 merus with row of spines on mesioventral margin ..... *U. nanophyes* MacArdle, 1901
– Antennal scale distinctly overreaching end of antennal peduncle. P2 merus without row of spines on mesioventral margin ..... *U. longior* n. sp.
98. Carapace lacking spine between anterolateral spine and anterior-most of branchial marginal spines. P2–4 propodi with pair of terminal spines preceded by at most 1 spine. Antennal scale falling short of end of antennal peduncle ..... *U. japonicus* Ortmann, 1892
– Carapace with 2 spines between anterolateral spine and anterior-most of branchial marginal spines. P2–4 propodi with pair of terminal spines preceded by 3 spines. Antennal scale overreaching end of antennal peduncle ..... *U. undecimspinosus* Kensley, 1977

Key to species from the eastern Pacific including southern part of South America

1. Carapace lateral margin with anterolateral spine, smooth elsewhere ..... *U. nitidus* (A. Milne Edwards, 1880)
– Carapace lateral margin with row of spines .. 2
2. P2–4 subchelate on dactylus and distal part of propodus ..... *U. bellus* Faxon, 1893
– P2–4 not subchelate 3
3. Transverse row of spines on anterior gastric region ..... *U. pubescens* Faxon, 1893
– No transverse row of spines on anterior gastric region 4
4. P2–4 having dactyli each with broad penultimate flexor marginal spine preceded by inclined spines close to one another, ultimate subequal to antepenultimate ..... *U. granulatus* Benedict, 1902
– P2–4 dactyli each with 6–8 stout spines, ultimate smaller than penultimate (confirmed by examination of syntypes, BMNH 1888:33) ..... *U. parvulus* (Henderson, 1885)

Uroptychus albatrossae Baba, 1988
See *Uroptychodes albatrossae* (Baba, 1988).

***Uroptychus alcocki* Ahyong & Poore, 2004**
Uroptychus alcocki Ahyong & Poore, 2004a: 15, fig. 2 (New South Wales, Queensland, and Tasman Sea, 137–419 m; type locality: SE of Ballina, New South Wales, 29°02'S, 153°48'E, 137 m [holotype, ♀, AM P31412). — Baba, this paper (Formosa Channel and Japan, 64–192 m).

***Uroptychus acostalis* Baba, 1988**
Uroptychus acostalis Baba, 1988: 20, fig. 7 (Makassar Strait, 732–1650 m; type locality: 10.6 miles NW of Mamuju Island, 2°28'15"S, 118°40'00"E, 1650 m [holotype, ♂, USNM 150312]); 1990: 932 (Madagascar, 580–810 m).

***Uroptychus alius* n. sp.**

Uroptychus alius Baba, this paper (type locality: Bay of Bengal, 19°42'N, 86°48'E, 1210–1240 m [holotype, ♂, ZMUC CRU-11484]).

***Uroptychus altus* n. sp.**

Uroptychus altus Baba, this paper (type locality: Kei Islands, 5°30'S, 132°35'E, 325 m [holotype, ♂, ZMUC CRU-11446]).

[*Uroptychus amabilis* Baba, 1979]

Uroptychus amabilis Baba, 1979a: 522, figs. 1, 2 (off Noumea, New Caledonia, 30 m [holotype, ♂, RMNH Crust. D. 31506]).

***Uroptychus australis* (Henderson, 1885)**

Diptychus australis Henderson, 1885: 420 (type localities: off Port Jackson, N of the Kermadec Islands, off Banda Island, 410–600 fm (750–1098 m) [syntypes, BMNH 1888:33; the type material includes 3 different species (Baba, unpublished)]).

Uroptychus australis: Henderson, 1888: 179, pl. 21: figs. 4, 4a–4c (off Kermadec Islands, Port Jackson, and off Banda, 360–600 fm (659–1098 m)). — Thomson, 1899: 197 (list). — Ahyong & Poore, 2004a: 18, fig. 3 (New South Wales, Victoria and Tasmania, between 458–476 m and 951–1150 m).

[The material from "Challenger" St. 164 (Port Jackson) and part of the material from Station 194 (off Banda) agree well with the species account by Ahyong & Poore (2004a). The lectotype is now assigned to the male from "Challenger" St. 164].

***Uroptychus babai* Ahyong & Poore, 2004**

Uroptychus granulatus: Baba, 1990: 923, fig. 9 (Madagascar, 880–920 m) (not *U. granulatus* Benedict, 1902).

Uroptychus babai Ahyong & Poore, 2004a: 22, fig. 4 (New South Wales, between 905–914 m and 1115–1152 m; type locality: E of Broken Bay, 33°31–34'S, 152°02–04'E, 905–914 m [holotype, ♂, AM P26782]).

***Uroptychus bacillimanus* Alcock & Anderson, 1899**

Uroptychus bacillimanus Alcock & Anderson, 1899a: 25 (type localities: off Travancore coast (Kerala, India) and off Sri Lanka, 320–430 fm (586–787 m) [syntypes, ZSIC 2340–2350/10]); 1899b: pl. 45, figs. 3, 3a (no record). — Alcock, 1901: 285 (off Travancore coast [Kerala] and off Sri Lanka, 296–820 fm (531–1501 m)).

***Uroptychus bellus* Faxon, 1893**

Uroptychus bellus Faxon: 1893: 193 (type localities: "Albatross" St. 3354 [SW point of Azuero Peninsula, Panama, 07°09.45'N, 080°50.00'W, 322 fm (589 m)] [syntype, 1 ♀, USNM 29166]; "Albatross" St. 3355 [SW point of Azuero Peninsula, Panama, 07°12.20'N, 080°55.00'W] [syntype, 1 ♂, not located]); 1895: 102, pl. 26, figs. 2, 2a, 2b (off Mariato Point, Panama, 182–322 fm (333–589 m)).

***Uroptychus belos* Ahyong & Poore, 2004**

Uroptychus belos Ahyong & Poore, 2004a: 25, fig. 5 (type locality: Britannia Seamount, SE of Brisbane, Tasman Sea, 28°17.47'S, 158°37.89'E, 419 m [holotype, ♀, AM P65830]).

Uroptychus benedicti Baba, 1977

See *Uroptychodes benedicti* (Baba, 1977).

***Uroptychus bicavus* Baba & de Saint Laurent, 1992**

Uroptychus bicavus Baba & de Saint Laurent, 1992: 323, fig. 1 (type locality: North Fiji Basin, 18°50'S, 173°29'W, active thermal vent, 2750 m [holotype, ♂, MNHN Ga 2350]).

***Uroptychus bispinatus* Baba, 1988**

Uroptychus bispinatus Baba, 1988: 25, fig. 9. (type locality: Moluccas between Halmahera and N Sulawesi, 2013 m [holotype, ♀, USNM 150311]).

***Uroptychus brachydactylus* Tirmizi, 1964**

Uroptychus brachydactylus Tirmizi, 1964: 399, fig. 19 (type locality: "John Murray" St. 42, South Arabian coast, 1415 m [holotype, ♂, BMNH 1966.2.3.20]).

***Uroptychus brevipes* Baba, 1990**

Uroptychus brevipes Baba, 1990: 932, fig. 4 (type locality: Madagascar, 22°15.7'S, 42°01.5'E, 750–810 m [holotype, ♂, MNHN Ga 1529]).

***Uroptychus brevirostris* van Dam, 1933**

Uroptychus brevirostris van Dam, 1933: 20, figs. 29–32 (type locality: Sulu Archipelago, 5°43.5'N, 119°40'E, 522 m [holotype, ♂, ZMA De. 101.694]). — van Dam, 1940: 96 (Java Sea, 6°15' S, 110°50' E, 41–52 m). — Baba, 1973: 117 (Yaeyama Group, Ryukyu Islands, Japan, depth

unknown).

***Uroptychus brevisquamatus* Baba, 1988**

Uroptychus brevisquamatus Baba, 1988: 28, fig. 10. (type locality: off S Obi, 732 m [holotype, ov. ♀, USNM 150319]).

***Uroptychus brucei* Baba, 1986**

Uroptychus brucei Baba, 1986b: 1, figs. 1, 2 (NW Australia, 406–458 m; type locality: 17°59.4'S, 118°18.4'E, 406–416 m [holotype, ♂, NTM Cr. 000604]).

***Uroptychus calcar* Ahyong & Poore, 2004**

Uroptychus calcar Ahyong & Poore, 2004a: 28, fig. 6 (New South Wales and Victoria, between 202 m and 458–461 m; type locality: E of Sydney, 33°42'S, 151°52'E, 380–390 m [holotype, ♂, AM P65829]).

***Uroptychus caldus* Ahyong & Poore, 2004**

Uroptychus caldus Ahyong & Poore, 2004a: 31, fig. 7 (Tasmania, 987–1200 m; type locality: J1 Seamount, 82.5 km SSE of SE Cape, 44°14.4'S, 147°21.6'E, 1200 m [holotype, ♀, NMV J44744]).

***Uroptychus cavirostris* Alcock & Anderson, 1899**

Uroptychus cavirostris Alcock & Anderson, 1899a: 26 (type locality: off E coast of N Andaman Island, 13°16'N, 93°8'E, 75–60 fm (137–110 m). [type, ov. ♀, ZSIC 2672/10]); 1899b: pl. 44: fig. 3 (no record).

Identity questionable:

Uroptychus cavirostris: van Dam, 1933: 22, figs. 33–34 (S of Kur Island, Kei Islands, 204 m). — Tirmizi, 1964: 408, figs. 34–39 (Maldives, 4229 m).

***Uroptychus chacei* (Baba, 1986)**

Gastroptychus chacei Baba, 1986a: 625, figs, 1, 2 (type locality: Andaman Sea off S Thailand, 7°08'N, 98°05.1'E, 267–283 m [holotype, ♂, USNM 231661]).

Uroptychus chacei: Baba, this paper (new combination).

***Uroptychus ciliatus* (van Dam, 1933)**

Chirostylus ciliatus van Dam, 1933: 12, figs. 17–19 (type locality: Kur Island, Kei Islands, 204 m [holotype, ♀, ZMA De. 101.696]).

Uroptychus ciliatus: Baba, this paper (Kei Islands, 233–290 m; new combination).

***Uroptychus comptus* Baba, 1988**

Uroptychus comptus Baba, 1988: 30, fig. 11 (type locality: off NE Borneo, 635 m [holotype, ♂, USNM 150458]).

***Uroptychus convexus* Baba, 1988**

Uroptychus convexus Baba, 1988: 32, fig. 12. (type locality: between Cebu and Bohol, 265 m [holotype, ♀, USNM 150320]).

***Uroptychus crassior* Baba, 1990**

Uroptychus crassior Baba, 1990: 935, fig. 5 (type locality: Madagascar, 15°19.0'S, 46°11.8'E, 405 m [holotype, ♀, MNHN Ga 1466]).

***Uroptychus crassipes* van Dam, 1939**

Uroptychus crassipes van Dam, 1939: 392, fig. 1 (type locality: Kei Islands, 5°29'S, 132°27'E, 290 m [holotype, ♂, ZMC]). — Baba, 1988: 35 (E coast of Mindoro, 518 m); this paper (Kei Islands, 290 m).

***Uroptychus crosnieri* Baba, 1990**

Uroptychus crosnieri Baba, 1990: 937, fig. 6 (type locality: Madagascar, 23°36.4'S, 43°31.3'E, 450–460 m [holotype, ♀, MNHN Ga 1468]).

***Uroptychus dentatus* Balss, 1913**

Uroptychus dentatus Balss, 1913a: 225 (type locality: E African coast, 1079 m [2 syntypes, ZMB 17485; 1 / syntype, MZS 349]).— Doflein & Balss, 1913, 137, fig. 5 (off E coast of Somali Republic, 1079 m). — Baba, 1990: 939, fig. 7 (Madagascar, 695–810 m).

***Uroptychus edisonicus* Baba & Williams, 1998**

Uroptychus edisonicus Baba & Williams, 1998: 145, figs. 1, 2 (type locality: Bismarck Archipelago, Papua New Guinea, 3°19.07'S, 152°34.92'E, active thermal vent, 1492 m [holotype, ov. ♀, USNM 251479]).

Uroptychus edwardi Kensley, 1981

See under *Uroptychus scambus* Benedict, 1902

***Uroptychus empheres* Ahyong & Poore, 2004**

Uroptychus empheres Ahyong & Poore, 2004a: 34, fig. 8 (type locality: "Andys" Seamount, Tasmania,

44°10.8'S, 147°00.0'E, 800 m [holotype, ♂, NMV J52864]).

[*Uroptychus ensirostris* Parisi, 1917]

Uroptychus ensirostris Parisi, 1917: 4, fig. 1 (type locality: Sagami Bay, depth unknown [holotype, ♂, MCSNM 46]). — Froglia, 1987: 148, fig. 1 (Sagami Bay (redescription of type)). — Froglia & Grippa, 1986: 261 (list).

***Uroptychus flinders* Ahyong & Poore, 2004**

Uroptychus flinders Ahyong & Poore, 2004a: 37, fig. 9 (Tasmania and Western Australia, between 520 m and 620–714 m; type locality: 47 km W of Richardson Point, Tasmania, 41°14'S, 144°07'E, 520 m [holotype, ov. ♀, SAMA C6071]).

***Uroptychus foulisi* Kensley, 1977**

Uroptychus foulisi Kensley, 1977: 168, fig. 5 (type locality: off NE South Africa, 28°37.8'S, 32°38.4'E, 1000–1200 m [holotype, ♂, SAMC A15336]).

***Uroptychus fusimanus* Alcock & Anderson, 1899**

Uroptychus fusimanus Alcock & Anderson, 1899a: 26 (type locality: off Travancore coast (Kerala), 430 fm (787 m) [syntypes, ZSIC 2339–2345/10]); 1899b: pl. 44: fig. 4 (no record). — Alcock, 1901: 283 (off Travancore coast [Kerala], 430 fm (787 m)).

***Uroptychus glaber* Baba, 1981**

Uroptychus glaber Baba, 1981b: 123, figs. 8, 9 (type locality: off E coast of Hachijo-jima, Izu Islands, Japan, 33°10.0'N, 140°02.7'E, 470 m [holotype, ♂, NSMT-Cr. 6177]).

Uroptychus glyphodactylus MacGilchrist, 1905

See under *Uroptychus scambus* Benedict, 1902.

***Uroptychus gordonae* Tirmizi, 1964**

Uroptychus gordonae Tirmizi, 1964: 397, figs. 10–13 (type locality: "John Murray" St. 158, Maldives, 786–1170 m [holotype, ♂, BMNH 1966.2.3.17-18]).

***Uroptychus gracilimanus* (Henderson, 1885)**

Diptychus gracilimanus Henderson, 1885: 420 (type locality: off Port Jackson, 410 fm (750 m) [holotype, ov. ♀, BMNH 1888:33]).

Uroptychus gracilimanus: Henderson, 1888: 181, pl. 21: figs. 5, 5a, 5b (Port Jackson, 410 fm (750 m)). — Parisi, 1917: 3 (Sagami Bay). — Tirmizi, 1964: 392, figs. 6–9 (Zanzibar, 421–457 m). — Baba, 1969c: 45, figs. 3, 4 (East China Sea, 570–740 m); 1988: 35 (Moluccas off W coast of Halmahera, 763–796 m); this paper (off Zamboanga, 458 m).

Not *Uroptychus gracilimanus*: Doflein & Balss, 1913: 134 (part) (one of the specimens from "Valdivia" St. 250 off S coast of Somali Republic, 1668 m, now in the collection of the Musée Zoologique, Strasbourg (1 ov. ♀, MZS 349) is referred to *U. remotispinatus* Baba & Tirmizi, 1979 (Baba, unpublished); one of the specimens from "Valdivia" St. 245 off S Somali Republic is identified with *U. vandamae* Baba, 1988 (see Baba, 1990); identity of the other specimens reported from "Valdivia" St. 191, 246,252, 253 in the Mozambique Channel, off S Somali Republic, and off W coast of Sumatra, in 638–1019 m, remain questionable). — Baba, 1990: 941, figs. 8a, b (Madagascar, 695–1300 m (= new species, Baba (unpublished)). — Ahyong & Poore, 2004a: 40. fig. 10 (New South Wales, Victoria and Tasmania, between 458–476 m and 1115–1152 m (= different species)).

***Uroptychus gracilimanus bidentatus* Doflein & Balss, 1913**

[because of brief description, the identity of this species remains questionable]

Uroptychus gracilimanus var. *bidentatus* Doflein & Balss, 1913: 135 (type localities: two different locations off E coast of Somali Republic, 1242–1289 m [1 syntype, ZMB 17483]).

Uroptychus grandirostris Yokoya, 1933

See *Uroptychodes grandirostris* (Yokoya, 1933).

***Uroptychus granulatus* Benedict, 1902**

Uroptychus granulatus Benedict, 1902: 293, fig. 37 (type locality: Galapagos Islands [between Santa Cruz and San Cristobal Islands, 00°29'00"S, 89°54'30"W], 392 fms (717 m) [3 syntypes, USNM 20567]). — Baba, 1988: fig. 16 (reexamination of type). — Wicksten, 1989: 315 (list).

Not *Uroptychus granulatus*: Baba, 1990: 943, fig. 9 (= *Uroptychus babai* Ahyong & Poore, 2004).

***Uroptychus hamatus* Khodkina, 1981**

Uroptychus hamatus Khodkina in Zarenkov & Khodkina, 1981: 87, fig. 4 (type locality: Marcus-Necker Rise, 1700–2300 m [holotype, ♂, SUM

MA-2244]).

***Uroptychus hesperius* Ahyong & Poore, 2004**

Uroptychus hesperius Ahyong & Poore, 2004a: 44, fig. 11 (type locality: off Cape Arid, Western Australia, 34°03'S, 125°31'E, 1011–1020 m [holotype, ♀, SAMA C6083]).

***Uroptychus inclinis* n. sp.**

Uroptychus inclinis Baba, this paper (type locality: Kei Islands, 5°32'S, 132°36'E, 245 m [holotype, ♀, ZMUC CRU-11334]).

***Uroptychus indicus* Alcock, 1901**

Uroptychus australis var. *indicus* Alcock, 1901: 284 (type localities: Arabian Sea off Cape Comorin and Bay of Bengal off Sri Lanka, 459–805 fm (840–1473 m) [syntypes, ZSIC]).

Identity not yet settled:

Uroptychus australis indicus, Van Dam, 1937, 101 (Solor Strait, 86 m).

Uroptychus australis var. *indicus*, Van Dam, 1933, 18, figs. 24–27 (W of Donggala (Sulawesi), Kei Islands, S of Timor, and near Rotti Island, 560–918 m). — Miyake in Miyake & Nakazawa, 1947, 734, fig. 2122 (no record). — Tirmizi, 1964, 394 (Zanzibar, 914 m).

Uroptychus indicus: Miyake 1965: 633, fig. 1039.

***Uroptychus insignis* (Henderson, 1885)**

Diptychus insignis Henderson, 1885: 419 (type locality: off Prince Edward Island, southern Indian Ocean, 310 fm (567 m) [syntypes, BMNH 1888:33]).

Uroptychus insignis: Henderson, 1888: 175, pl. 21: figs. 1, 1a, 1c [maybe not 1b, 1d] (off Prince Edward Island, 310 fm (567 m)).

***Uroptychus japonicus* Ortmann, 1892**

Uroptychus japonicus Ortmann, 1892: 248, pl. 11: figs. 3, 3b, c, f, g, h, i, z. (type locality: Sagami Bay, 200 fm (366 m) [3 ♂, 2 ♀, syntypes (one of the three male syntypes is not present with this lot), MZS 348 (see below)]). — Baba, 2001: 147, fig. 1 (redescription of type [2 ♂, 1 ov. ♀, 1 ♀, MZS 348; ov. ♀ was designated as lectotype, the others as paralectotypes]).

***Uroptychus joloensis* van Dam, 1939**

Uroptychus joloensis van Dam, 1939: 395, figs. 2, 2a, 2b, 2c (type locality: Jolo Sea, 37.8–56.7 m [holotype, ♂, ZMC]). — Baba, this paper (Kei Islands, 250–90 m).

Uroptychus kudayagi Miyake, 1961: 237, figs. 1, 2 (E Sagami Bay and W coast of Kyushu, 30–80 m (type locality: Kannonzuka-dashi, Amadaiba, E Sagami Bay, 70–80 m [holotype, ♂, BLIH 899]). — Miyake, 1982: 143, pl. 48, fig. 2 (Kushimoto, S Kii Peninsula).

Uroptychus kudayagi Miyake, 1961

See under *Uroptychus joloensis* van Dam, 1939.

***Uroptychus laperousazi* Ahyong & Poore, 2004**

Uroptychus laperousazi Ahyong & Poore, 2004a: 47, fig. 12 (Great Australian Bight, between 984–1015 m and 999–1110 m; type locality: S of Eucla, Great Australian Bight, 33°45'S, 129°17'E, 999–1110 m [holotype, ov. ♀, SAMA C6084]).

***Uroptychus latirostris* Yokoya, 1933**

Uroptychus latirostris Yokoya, 1933: 69, fig. 30 (type locality: near Ashizuri-zaki, Japan, 102 m [type no longer extent]). — Baba, 1973: 118, fig. 1 (Japan from Tosa Bay, Sagami Bay, Izu Islands, and Bonin Islands 100–200 m); this paper (Tosa Bay, Izu Islands, Sagami Bay, between 9–27 m and 200 m; designation of neotype: Ashizuri-zaki, Tosa Bay, Japan, 150 m [♂, ZLKU 12993]).

***Uroptychus latus* Ahyong & Poore, 2004**

Uroptychus latus Ahyong & Poore, 2004a: 49, fig. 13 (type locality: S of Point Hicks, Bass Strait, Victoria, 38°22.66'S, 149°18.41'E, 1073 m [holotype, ov. ♀, NMV J17059]).

***Uroptychus levicrustus* Baba, 1988**

Uroptychus levicrustus Baba, 1988: 36, fig. 13 (type locality: off S Obi, 1°54'00"S, 127°36'00"E, 602 m [holotype, ov. ♀, USNM 150309]).

***Uroptychus litosus* Ahyong & Poore, 2004**

Uroptychus litosus Ahyong & Poore, 2004a: 52, fig. 14 (Tasmania, between 800 m and 1050–1120 m; type locality: "Andys" Seamount, 65.5 km SSE of SE Cape, 44°10.8'S, 147°00.0'E, 800 m [holotype, ♂, NMV J52862]).

***Uroptychus longioculus* Baba, 1990**

Uroptychus longioculus Baba, 1990: 944, fig. 10 (Madagascar, 240–410 m; type locality: 12°42.4'S, 48°14.1'E, 375–380 m [holotype, ♂, MNHN Ga

1460]).

***Uroptychus longicheles* Ahyong & Poore, 2004**

Uroptychus longicheles Ahyong & Poore, 2004a: 55, fig. 15 (type locality: Gifford Guyot, Tasmania, 306 m [holotype, ov. ♀, AM P65826]).

***Uroptychus longior* n. sp.**

Uroptychus longior Baba, this paper (Kei Islands and Bali Sea, 240–385 m; type locality: Bali Sea, 7°29'S, 114°49'E, ca. 240 m [holotype, ♂, ZMUC CRU-11075]).

***Uroptychus longvae* Ahyong & Poore, 2004**

Uroptychus longvae Ahyong & Poore, 2004a: 58, fig. 16 (type locality: W of Cape Wiles, Great Australian Bight, 34°56'S, 133°20'E, 805–816 m [holotype, ov. ♀, SAMA C6064]).

***Uroptychus magnispinatus* Baba, 1977**

Uroptychus magnispinatus Baba, 1977c: 144, figs. 3, 4 (type locality: off Midway Island, 700–800 m [holotype, ov. ♀, NSMT-Cr. 4359]).

[*Uroptychus maori* Borradaile, 1916]

Uroptychus maori Borradaile, 1916: 92, fig. 6 (type locality: off Three Kings Islands, New Zealand, 183 m [holotype, ♂, BMNH 1917.1.29.116]).

***Uroptychus mauritius* n. sp.**

Uroptychus mauritius Baba, this paper (Mauritius: Tombeau bay and N of Port Louis, 238 m; type locality: N of Port Louis, Mauritius, ca. 238 m [holotype, ov. ♀, ZMUC CRU-11128]).

Uroptychus mortenseni van Dam, 1939

See *Uroptychodes mortenseni* (van Dam, 1939).

***Uroptychus multispinosus* Ahyong & Poore, 2004**

Uroptychus multispinosus Ahyong & Poore, 2004a: 60, fig. 17 (Queensland, 318–364 m; type locality: E of Southport, 27°55–58'S, 153°55'E, 318 m [holotype, ♀, AM P31415]).

[*Uroptychus murrayi* Tirmizi, 1964]

Uroptychus murrayi Tirmizi, 1964: 397, figs. 14–18 (type locality: Indian Ocean ("John Murray' collection, station not known) [holotype, ♀, BMNH 1966.2.3.19]).

***Uroptychus nanophyes* MacArdle, 1901**

Uroptychus nanophyes McArdle, 1901: 525 (type locality: NE coast of Ceylon, "Investigator" St. 284 [7°55'N, 81°47'E], 506 fms (926 m) [type, ZSIC]). — Alcock & McArdle, 1902: pl. 57: figs. 1, 1a (no record). — van Dam, 1940: 96, fig. 1 (Java Sea, 66 m). — Baba, 1981b: 117, fig. 5 (Izu Shoto, Japan, 440–510 m); this paper (Kei Islands, 54–300 m).

***Uroptychus naso* van Dam, 1933**

Uroptychus naso van Dam, 1933: 23, figs. 35–37 (type localities: Kur Island and Taam Island, Kei Islands, 204–304 m [2 ♂ syntypes (Siboga St. 253, 304 m), ZMA De. 101.692; 1 ♂ and 1 ♀ syntypes (Siboga St. 251, 204 m), ZMA De. 101.667]); 1939: 402 (Kei Islands and W coast of Kyushu, Japan, 153–363 m); 1940: 97 (Java Sea, 68–71 m). — Baba, 1969c: 42, figs. 1, 2 (East China Sea and Tosa Bay, Japan, 152–330 m); 1988: 39. (Moluccas off W coast of Halmahera, Sulu Archipelago, 240–439 m); this paper (Kei Islands and Japan, 245–268 m). — Wu *et al.*, 1997: 81, figs. 5, 12B (Taiwan).

***Uroptychus nigricapillis* Alcock, 1901**

Uroptychus nigricapillis Alcock, 1901: 283, pl. 3: fig. 3 (type locality: Andaman Sea, 669 fm (1224 m) [holotype, ♀, ZSIC 3443/10]). — Alcock & McArdle, 1902: pl. 56: fig. 3 (no record). — Laurie, 1926: 123 (Saya de Malha Bank, 145 fm (265 m)). — van Dam, 1933: 26 (W of Makassar, 450 m); 1940: 98, fig. 2 (Java Sea, 66 m). — Tirmizi, 1964: 390, figs. 4, 5 (South Arabian coast, Zanzibar, and Maldives, 914–1939 m). — Baba, 1981b: 116, fig. 4 (off SE Kyushu, Japan, 1125 m); 1988: 40 (Flores Sea off S Sulawesi, between Siquijor and Bohol, South China Sea off SW Luzon, 717–1266 m); 1990: 947 (Madagascar, 1200–2000 m); this paper (off Kenya, 1551 m).

***Uroptychus nitidus* (A. Milne Edwards, 1880)**

Diptychus nitidus A. Milne Edwards, 1880: 62 (part) (type localities: West Indies from NW of Cuba, Frederickstadt, Santa Cruz, St. Kitts, Guadeloupe, Dominique, Martinique, Ste. Lucie, St. Vincent, Cariacou, Grenada, and Barbados, 88–734 fm (161–1343 m) [syntypes, MCZ?]). — A. Milne Edwards & Bouvier, 1899: 87 (Azores, 1022 m).

Uroptychus nitidus occidentalis Faxon, 1893: 192 (type locality: "Albatross" St. 3384 [Gulf of Panama, 07°31.30'N, 079°14.00'W, 458 fm (838 m) [syntypes, 2 ♂, 2 ov. ♀, not located]); 1895: 101, pl. 26, figs. 1, 1a (Gulf of Panama, 458 fm (838 m)). — Balss, 1913b: 27 (Sagami Bay, 730 m). —

Parisi, 1917: 3 (Sagami Bay). — Yokoya, 1933: 67 (Tosa Bay, Suruga Bay, Kurose Bank near Hachijo, E of Kagoshima, E of Ashizuri-zaki, W of Muroto-zaki, W of Tanabe, Kii Strait, near Shio-misaki, SE of Toba (Mie), S of Atsumi, S of Hamana Lake, 91–609 m). — Baba, 1973: 120, fig. 2, pl. 4: fig. 1 (Sagami Bay).

Uroptychus nitidus: Alcock & Anderson, 1894: 173 (Laccadive Sea, 636 fm (1160 m)). — Henderson, 1888: 174, pl. 21: figs. 6, 2a (West Indies: off Sombrero Island and off Culebra Island, 390–450 fm (714–824 m)). — Anderson, 1896: 101 (*Investigator* St. 201, 320–296 fm (586–542 m)). — Caullery, 1896: 393, pl. 17, figs. 1, 2 (Golfe de Gascogne, 1710 m). — Bouvier, 1922: 49 (Cape Verde Islands, and Pres de Madere, 875–1968 m). — Barnard, 1950: 495, fig. 92, g–i (off Cove Rock (East London), 80 fm (146 m)). — Kensley, 1977: 167, fig. 4 (off NE South Africa, 560–1200 m).

Diptychus nitidus var. *concolor* A. Milne Edwards & Bouvier, 1900: 360, pl. 4, fig. 4, pl. 32, figs. 15–19 (Golfe de Gascogne, Les Pilones (25°39'N, 18°22'W), between cap Bojador and cap Blanc, off Spanish Sahara, N of banc d'Auguin (17°12'N, 19°27'W), Cape Verde Islands, de Faya a St. Michel, Morocco, 495–1480 m). — Hansen, 1908: 39 (SW of Iceland, 633 fm (1158 m)).

Uroptychus nitidus concolor: Bouvier, 1922: 49 (NE of l'ile Maio (15°15'N, 23°04'05W), SW of l'ile Sal (16°34'N, 23°03'45W), vicinity of l'ile S. Antao (16°55'N, 25°31'45W), off Bretagne (47°36'N, 7°38'W), and Azores, 628–1642 m). — Türkay, 1976: 30, figs. 6, 8, 10 (coast of Morocco, 1300 m).

Uroptychus nitidus (typical form): Chace, 1942: 11, fig. 3 (N coast of Cuba, NW of Dry Tortugas (Fla.), off Cayo Lobos (Campeche), off St. Croix, off Guadeloupe, off Dominica, off Martinique, off St. Lucia, off St. Vincent, 88–734 fm). — Pequegnat & Pequegnat, 1970: 159, fig. 5–15 (NW and SW Gulf of Mexico, 425–720 fm (778–1318 m)).

Uroptychus nitidus (variety A): Chace, 1942: 14, fig. 4 (N coast of Cuba, and E of St. Augustine, Fla., 360–500 fm). — Pequegnat & Pequegnat, 1970: 159, fig. 5–15 (NW and SW Gulf of Mexico, 425–720 fm (778–1318 m)).

Uroptychus nitidus (variety B): Chace, 1942: 15, fig. 5 (N coast of Cuba, 250–400 fm).

Uroptychus nitidus (variety C): Chace, 1942 17, fig. 6 (N coast of Cuba, 145–240 fm).

[*Uroptychus novaezealandiae* Borradaile, 1916]

Uroptychus novaezealandiae Borradaile, 1916: 93, fig. 94 (type locality: off North Cape, New Zealand, 128 m [holotype, BMNH 1917.1.29.117]).

Uroptychus nowra Ahyong & Poore, 2004
Transferred to *Uroptychodes* Baba, 2004.

***Uroptychus occultispinatus* Baba, 1988**

Uroptychus granulatus var. *japonicus* Balss, 1913b: 25, fig. 18 (type locality: Sagami Bay [syntypes, not located]). — Miyake in Miyake & Nakazawa, 1947: 735, fig. 2124 (no record).

Uroptychus granulatus japonicus: Parisi, 1917: 3 (Tokyo Bay).

Uroptychus occultispinatus Baba, 1988: 41, figs. 14, 15 (between Siquijor and Bohol, 807 m [new name proposed for *U. granulatus japonicus*]).

Uroptychus okutanii Baba, 1981
See *Uroptychodes okutanii* (Baba, 1981).

***Uroptychus onychodactylus* Tirmizi, 1964**

Uroptychus onychodactylus Tirmizi, 1964: 411, figs. 40–42 (Maldives, 786–1463 m; type locality: "John Murray" St. 158, 786–1170 m [holotype, ov. ♀, BMNH 1966.2.3.41]).

***Uroptychus paenultimus* n. sp.**

Uroptychus paenultimus Baba, this paper (type locality: Kei Islands, 5°30'S, 132°35'E, 320 m [holotype, ov. ♀, ZMUC CRU-11318]).

***Uroptychus paracrassior* Ahyong & Poore, 2004**

Uroptychus paracrassior Ahyong & Poore, 2004a: 66, fig. 19 (Queensland, 364–380 m; type locality: NE of Tweed Heads, 28°02–05'S, 153°57'E, 364 m [holotype, ov. ♀, AM P31408]).

***Uroptychus parvulus* (Henderson, 1885)**

Diptychus parvulus Henderson, 1885: 420 (type locality: Straits of Magellan, 400 fm (732 m) [syntypes, BMNH 1888:33]).

Uroptychus parvulus: Henderson, 1888: 177, pl. 21: figs. 3, 3a (Sarmiento Channel, Chile, 400 fm (732 m)). — Haig, 1955: 31 (no record).

***Uroptychus patulus* Ahyong & Poore, 2004**

Uroptychus patulus Ahyong & Poore, 2004a: 69, fig. 20 (Victoria and Tasmania, 970–1190 m [holotype

ov. ♀, NMV J21045]).

***Uroptychus pilosus* Baba, 1981**

Uroptychus pilosus Baba, 1981b: 126, figs. 10, 11 (Japan from Kumanonada off E coast of Kii Peninsula and off SE Kyushu, 1120–1160 m; type locality: Kumanonada off E coast of Kii Peninsula, 33°53.2'N, 136°51.2'E, 1120–1160 m [holotype, ♂, NSMT-Cr. 6172]); this paper (Makassar Strait, 1600 m). — Ahyong & Poore, 2004a: 71, fig. 21 (New South Wales, 987–1025 m).

***Uroptychus politus* (Henderson, 1885)**

Diptychus politus Henderson, 1885: 420 (type locality: N of Kermadec Islands, 600 fm (1098 m) [1 ♂, 1 ov. ♀ syntypes, BMNH 1888:33]).

Uroptychus politus: Henderson, 1888: 178, pl. 6: figs. 2, 2a, 2b (N of Kermadec Islands, 600 fm (1098 m)). — Thomson, 1899: 196 (list). — Baba, 1974: 387, fig. 5 (reexamination of holotype).

***Uroptychus pronus* n. sp.**

Uroptychus pronus Baba, this paper (type locality: Kei Islands, 5°47'20"S, 132°13'E, 300 m [holotype, ♂, ZMUC CRU-11317]).

***Uroptychus pubescens* Faxon, 1893**

Uroptychus pubescens Faxon, 1893: 192 (type localities: "Albatross" St. 3354 [SW point of Azuero Peninsula, Panama, 07°09.45'N, 080°50.00'W, 322 fm (589 m)] [syntypes, 3 ov. ♀, not located]; "Albatross" St. 3355 [SW point of Azuero Peninsula, Panama, 07°12.20'N, 080°55.00'W] [syntype, 1 ov.♀, USNM 29173]); 1895: 101, pl. 26, figs. 3, 3a, 3b (off Mariato Point, Panama, 182–322 fm (333–589 m)).

***Uroptychus raymondi* Baba, 2000**

Uroptychus raymondi Baba, 2000: 250, fig. 3 (type locality: Off St. Helens, Tasmania, 645 m [holotype, ov. ♀, TM G3517]). — Ahyong & Poore, 2004a: 73, fig. 22 (Victoria and Tasmania, 644–650 m).

***Uroptychus remotispinatus* Baba & Tirmizi, 1979**

Uroptychus gracilimanus: Doflein & Balss, 1913: 134 (part) (1 ov. ♀ (MZS 349) from "Valdivia" St. 250 off S coast of Somali Republic, 1668 m) (not *U. gracilimanus* (Henderson, 1885)).

Uroptychus remotispinatus Baba & Tirmizi, 1979: 52, fig. 1, 2 (Japan, off Durban, and off Mozambique, 1320–1600 m; type locality: Bungo Strait between Kyushu and Shikoku, Japan, 1320 m [holotype, ov. ♀, USNM 150318]). — Baba, 1990: 947 (Madagascar, 850–2000 m); this paper (Makassar Strait, 1600 m).

***Uroptychus sagamiae* n. sp.**

Uroptychus sagamiae Baba, this paper (type locality: Sagami Bay, Japan, 732 m [holotype, ♀, 521]).

***Uroptychus scambus* Benedict, 1902**

Uroptychus scambus Benedict, 1902: 297, fig. 41 (type locality: off Honshu, Japan, 337 fms (617 m) [Entr. Port Heda, N. 86d, E. 2 M] [holotype, ov. ♀, USNM 26165]). — Doflein & Balss, 1913: 134 (SW of Great Nicobar and W entrance of Sombrero Channel, 296–805 m). — van Dam, 1937: 100, fig. 1 (Solor Strait). — Baba, 1981b: 120 (Kumanonada and Izu-shoto, Japan, 1120–1830 m); 1988: 43 (Teluk Tomini (Sulawesi), S of Bungo Strait, SW of Omae Zaki, 741–1184 m); this paper (Makassar Strait, 2084 m).

Uroptychus glyphodactylus MacGilchrist, 1905: 249 (type locality: E of the Andamans, "Investigator" St. 331 [11°46'30"N, 93°16'E], 569 fm (1041 m) [2 syntypes, ZSIC]). — Alcock & MacGilchrist, 1905: pl. 70, fig. 4; pl. 71: figs. 1, 1a, 1b, 1c, 1d (no record).

Uroptychus edwardi Kensley, 1981a: 69, figs. 6, 7 (type locality: off between Durban and East London, 900 m [holotype, ov. ♀, SAF A16033]).

***Uroptychus scandens* Benedict, 1902**

Uroptychus scandens Benedict, 1902: 298, fig. 42 (type locality: off Honshu, Japan [Ose Zaki, S. 56d, W. 1.6 M], 68–65 fms (124–119 m) [holotype, ov. ♀, USNM 26166]). — Balss, 1913b: 27, fig. 20 (Sagami Bay, 150 m). — Yokoya, 1933: 68 (Japan (E of Boshu, Suruga Bay, and Bungo Strait), 110–393 m). — van Dam, 1933: 27, fig. 38 (S of Kur Island of the Kei Islands, 204 m). — van Dam, 1937: 102 (Banda Sea); 1940: 97 (Java Sea, 68–71 m). — Miyake, 1960: 97, pl. 48: fig. 7(no record); 1965: 634, fig. 1040 (no record). — Miyake in Miyake & Nakazawa, 1947: 734, fig. 2123 (no record). — Miyake & Baba, 1967c: 227, fig. 2 (East China Sea, 145 m). — Baba, 1969c: 47 (East China Sea, 120 m); 1981b: 132 (off SW Kyushu, and Izu Shoto, Japan, 310–495 m); this paper (Kei Islands, off Zamboanga and Japan, between 137 m and 293–366 m). — Kim & Choe, 1976: 43, fig. 1 (Jeju Island, Korea). — Takeda, 1982: 50, fig. 148 (no

record).

***Uroptychus setosidigitalis* Baba, 1977**

Uroptychus setosidegitalis Baba, 1977c: 148, figs. 5, 6 (type locality: off Midway Island, 700–800 m [holotype, ov. ♀, SNMT-Cr. 4357]).

***Uroptychus setosipes* Baba, 1981**

Uroptychus setosipes Baba, 1981b: 120, fig. 7 (S of Kyushu, Japan, 770–1010 m; type locality: E of Tokara-gunto, 29°24.5'N, 129°59.0'E, 1000–1010 m [holotype, ♂, NSMT-Cr. 6175]).

***Uroptychus sexspinosus* Balss, 1913**

Uroptychus sexspinosus Balss, 1913b: 27, fig. 21 (type locality: Okinose, Sagami Bay, Japan, 500 m [type, not located]).

***Uroptychus sibogae* van Dam, 1933**

Uroptychus sibogae van Dam, 1933: 28, figs. 39–41(type locality: W of Manado, 1901 m [holotype, ♂, ZMA De. 101.665]). — Baba, 1981b: 119, fig. 6 (Izu Shoto, Japan, 430–495 m); 1988: 45. (Moluccas off W coast of Halmahera, 498 m); this paper (Kei Islands, Bali Sea and Japan, 183–345 m).

***Uroptychus simiae* Kensley, 1977**

Uroptychus simiae Kensley, 1977: 170, figs. 6–7 (off NE South Africa, 400–550 m; type locality: 27°44.4'S, 32°42.8'E, 400–450 m [holotype, ♂, SAMC A15341]). — Baba, this paper (off Durban, between 412 m and 445–460 m).

***Uroptychus similis* Baba, 1977**

Uroptychus similis Baba, 1977c: 150, figs. 7, 8 (type locality: off Midway Island, 700–800 m [holotype, ov. ♀, NSMT-Cr. 4355]).

***Uroptychus siraji* Tirmizi, 1964**

Uroptychus siraji Tirmizi, 1964: 413, fig. 43 (type locality: "John Murray" St. 159, Maldives, 914–1463 m [holotype, ov. ♀, BMNH 1966.2.3.41]).

***Uroptychus soyomaruae* Baba, 1981**

Uroptychus soyomaruae Baba, 1981b: 129, figs. 12, 13 (type locality: SE of Miyake-jima, Izu Islands, Japan, 33°55.1'N, 140°00.5'E, 860–870 m [holotype, ov. ♀, NSMT-Cr. 6178]); 1990: 948 (Madagascar, 925–975 m). — Zarenkov & Khodkina, 1981: 89, fig. 5 (Marcus-Necker Rise, 1360–2300 m).

***Uroptychus spinimanus* Tirmizi, 1964**

Uroptychus spinimanus Tirmizi, 1964: 405, figs. 28–33 (type locality: "John Murray" St. 54, South Arabian coast, 1046 m [syntypes, 2 ♂, 2 ♀, BMNH 1966.2.3.23-26]).

Uroptychus spinimarginatus (Henderson, 1885)

[Originally *Diptychus spinimarginatus* Henderson, 1885]

See *Uroptychodes spinimarginatus* (Henderson, 1885).

***Uroptychus spinirostris* (Ahyong & Poore, 2004)**

Gastroptychus spinirostris Ahyong & Poore, 2004a: 9, fig. 1 (type locality: NE of Tweed Heads, Queensland, 28°02–05'S, 153°57'E, 364 m [holotype, ♂, AM P31418]).

Uroptychus spinulifer van Dam, 1940

See *Uroptychodes spinulifer* (van Dam, 1940).

***Uroptychus sternospinosus* Tirmizi, 1964**

Uroptychus sternospinosus Tirmizi, 1964: 403, figs. 20–27 (type locality: "John Murray" St. 159, Maldives, 914–1463 m [syntypes, 1 ♂, 1 ov. ♀, BMNH 1966.2.3.21-22]).

***Uroptychus subsolanus* Ahyong & Poore, 2004**

Uroptychus subsolanus Ahyong & Poore, 2004a: 75, fig. 23 (Victoria and South Australia, 999–1110 m; type locality: S of Point Hicks, Bass Strait, Victoria, 38°22.66'S, 149°18.41'E, 1073 m [holotype, ov. ♀, NMV J17067]).

***Uroptychus suluensis* van Dam, 1933**

Uroptychus suluensis van Dam, 1933: 29, figs. 42–44 (type locality: N of Sulu Islands, 275 m [syntypes, 1 ♂, 1 ♀, ZMA De. 101.693]).

***Uroptychus thermalis* Baba & de Saint Laurent, 1992**

Uroptychus thermalis Baba & de Saint Laurent, 1992: 324, fig. 2 (type locality: North Fiji Basin, 16°59.50'S, 173°55.47'W, hydrothermal vent, 2000 m [holotype, ♂, MNHN Ga 2351]). — Ahyong & Poore, 2004a: 77, fig. 24 (Queensland, 1497 m).

***Uroptychus tomentosus* Baba, 1974**

Uroptychus tomentosus Baba, 1974: 384, figs. 3, 4 (E coast of South Island, New Zealand, 116–382 m;

type locality: 45°14.3'S, 171°29.2'E, 116 m [holotype, ♂, ZLKU 15125]).

[*Uroptychus triangularis* Miyake & Baba, 1967]
Uroptychus triangularis Miyake & Baba, 1967a: 203, fig. 1 (type locality: near Muko-jima, Bonin Islands, depth unknown [holotype, ov. ♀, ZLKU 4883]).

***Uroptychus tridentatus* (Henderson, 1885)**
Diptychus tridentatus Henderson, 1885: 421 (type locality: East Indian Archipelago, 15 fm (27 m), depth record questioned by the author [holotype, ov. ♀, BMNH 1888:33]).
Uroptychus tridentatus: Henderson, 1888: 181, pl. 6: figs. 1, 1a (Ambon, 15 fm (27 m) [depth record questioned by author]). — van Dam, 1933: 30, figs. 45–46 (N of Sulu Islands, Taam Island (Kei Islands), 275–305 m). — van Dam, 1937: 99 (Solor Strait). — Baba, 1973: 117 (Japan: Yaeyama Group of the Ryukyus, off Hachijo-jima of Izu Shoto, and near Muko-jima of the Bonin Islands, 200 m); 1990: 948 (Madagascar, 250–255 m); this paper (New Caledonia and Norfolk Islands, 290–460 m; reexamination of holotype).

***Uroptychus undecimspinosus* Kensley, 1977**
Uroptychus undecimspinosus Kensley, 1977: 173, figs. 8, 9 (type locality: off NE South Africa, 360–420 m [holotype, ♂, SAMC A15315]).

***Uroptychus valdiviae* Balss, 1913**
Uroptychus valdiviae Balss, 1913a: 225 (type locality: Sombrero Canal, Nicobars, 805 m [syntypes: 1 ♂ and 1 ♀, ZMB 17484]). — Doflein & Balss, 1913: 136, fig. 4 (W entrance of Sombrero Channel, Nicobars, 805 m).

***Uroptychus vandamae* Baba, 1988**
Uroptychus gracilimanus: Doflein & Balss, 1913: 134 (part) (Zanzibar, 463 m) (not *U. gracilimanus* (Henderson, 1885).
Uroptychus vandamae Baba, 1988: 49, fig. 21 (Moluccas off W coast of Halmahera, and Makassar Strait, 655–732 m; type locality: Moluccas off W coast of Halmahera, 0°21'30"N, 127°16'45"E, 655 m [holotype, ♂, USNM 150316]); 1990: 949, fig. 8c (Madagascar, 450–1200 m).

***Uroptychus wolffi* n. sp.**
Uroptychus wolffi Baba, this paper (Kei Islands, 5°28'S, 132°36'E, 385 m [holotype ♂, ZMUC CRU-11518]).

***Uroptychus xipholepis* van Dam, 1933**
Uroptychus xipholepis van Dam, 1933: 32, figs. 47–50 (Banda Sea, 5°26.6'S, 127°36.5'E, 1595 m [holotype, ♂, ZMA De. 101.666]).

***Uroptychus yokoyai* Ahyong & Poore, 2004**
Uroptychus yokoyai Ahyong & Poore, 2004a: 79, fig. 25 (Tasman Sea, 295–306 m; type locality: Gifford Guyot, E of Brisbane, 26°44.27'S, 159°28.93'E, 306 m [holotype, ♂, AM P65827]).

***Uroptychus zeidleri* Ahyong & Poore, 2004**
Uroptychus zeidleri Ahyong & Poore, 2004a: 82, fig. 26 (type locality: W of Richardson Point, Tasmania, 41°15'S, 144°08'E, 520 m [holotype, ov. ♀, SAMA C6066]).

***Uroptychus zezuensis* Kim, 1972**
Uroptychus zezuensis Kim, 1972: 53, figs. 1, 2 (type locality: off Seogwipo, Jeju Island, 60 m [holotype, ov. ♀, SNU]). — Kim, 1973: 171, fig. 17, pl. 64: fig. 4a, 4b (off Seogwipo, Jeju Island). — Baba, this paper (Nagasaki, Japan and Philippines, between 188–192 m and 311 m).

Species not determined:
Uroptychus sp. Haig, 1974: 447 (Western Australia).

Family Galatheidae Dana, 1852

Genus *Agononida* Baba & de Saint Laurent, 1996

Agononida Baba & de Saint Laurent, 1996: 441 (gender feminine).

Type species: *Agononida incerta* Henderson, 1888.

Remarks: *Agononida squamosa* var. *prolixa* Alcock, 1894, previously known only from the eastern Indian Ocean, was shifted to a distinct species by Ahyong & Poore (2004b).

Distribution: Now 25 species are known from the Indo-Pacific, all occurring in the western Pacific. Three of these also occur in the Indian Ocean, and another one in the Southern Ocean. Twenty-four species inhabit transitional depths, five of which go down to upper bathyal depths, and other three of which are known on the continental shelf. *Agononida fortiantennata* (Baba, 1988) is the only one to occur solely in depths below