

Deep-sea squat lobsters (Crustacea: Decapoda: Anomura: Galatheidae, Munididae and Munidopsidae) from the SJADES 2018 biodiversity cruise

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Abstract. A total of 27 species of squat lobsters from three families (Galatheidae, Munididae and Munidopsidae) is reported from the South Java Deep-Sea (SJADES) Biodiversity Expedition in Indonesia in 2018. Among them, *Agononida prolixa* (Alcock, 1894), *Cervimunida princeps* Benedict, 1902, *Munida cornuta* Macpherson, 1994, *Munida typhle* Macpherson, 1994, *Paramunida cristata* Macpherson, 2004, *Paramunida luminata* Macpherson, 1996, and *Munidopsis comarge* Taylor, Ah Yong & Andreakis, 2010, are new records from Indonesian waters. Colour photographs are provided for 20 species.

Key words. squat lobsters, Galatheoidea, South Java Deep-Sea

INTRODUCTION

The squat lobsters (Galatheoidea and Chirostyloidea) are a species-rich group amongst the decapod Crustacea and include approximately 1,000 species in 41 genera (e.g., Baba et al., 2008; Macpherson & Robainas-Barcia, 2015; Baba, 2018). However, there are only a few studies of squat lobsters of the families Galatheidae, Munididae, and Munidopsidae in Indonesia. Based on published literature concerning these families, some 130 species and 15 genera are reported from Indonesia (Baba, 1988, 2005; Macpherson, 1993a, 1993b, 1997; Macpherson & Baba, 1993; Baba et al., 2008; Ah Yong, 2014). The family Galatheidae is represented by 21 species and four genera, the family Munididae by 71 species and 10 genera, and the family Munidopsidae represented by 44 species and three genera.

Recently, the South Java Deep-Sea (SJADES) Biodiversity Expedition, which was a collaborative study carried out in 2018 between the Indonesian Institute of Sciences and the National University of Singapore, collected many specimens of squat lobsters. A comprehensive study on the material collected revealed 27 species in the families Galatheidae, Munididae, and Munidopsidae. The family Galatheidae is represented only by one species of the genus *Galathea*, the family Munididae by 12 species from four genera

(*Agononida*, *Cervimunida*, *Munida*, and *Paramunida*), and the family Munidopsidae by 14 species of the genus *Munidopsis*. Among them, seven species are recorded for the first time from Indonesian waters, namely *Agononida prolixa* (Alcock, 1894), *Cervimunida princeps* Benedict, 1902, *Munida cornuta* Macpherson, 1994, *Munida typhle* Macpherson, 1994, *Paramunida cristata* Macpherson, 2004, *Paramunida luminata* Macpherson, 1996, and *Munidopsis comarge* Taylor, Ah Yong & Andreakis, 2010.

We compiled published taxonomic information on deep-sea squat lobsters in the region of South Java, including their synonymy, geographical distribution, and type locality of each species. Family, genera, and species are listed in alphabetical order. Specimens are deposited in the collections of the Museum Zoologicum Bogoriense (MZB) and Research Center for Oceanography (RCO), Indonesian Institute of Sciences (LIPI); and the Lee Kong Chian Natural History Museum, National University of Singapore (ZRC). To indicate specimen size, carapace length (cl) was measured along the dorsal midline from the base of the rostrum to the posterior margin of the carapace.

SYSTEMATIC ACCOUNT

Superfamily Galatheoidea Samouelle, 1819

Family Galatheidae Samouelle, 1819

Galathea Fabricius, 1793

Galathea sp.
(Fig. 1A)

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Material examined. 1 male, 3.8 mm cl (RCO CRU 5001), Indian Ocean, South of Cilacap, Indonesia, 8°13.038'S–8°13.150'S, 109°07.689'E–109°08.216'E, 290–295 m, stn CP38, 30 March 2018.

Colouration. Base colour translucent light pink. Carapace with orange longitudinal stripe arising behind each eye, extending posteriorly on to abdominal somite 4, with another flanking stripe in midline of abdominal somite 2–4. Spines on P1 orange.

Distribution. South of Cilacap, Indonesia, depth 290–295 m.

Remarks. This single specimen seems to be closely related to the species *Galathea albatrossae* Baba, 1988, but the colouration and distributive depth are different. The carapace of *G. albatrossae* has a reddish-brown longitudinal stripe arising behind each eye, extending posteriorly on to abdominal somite 4 and P1 reddish brown (Baba et al., 2009) but it is yellowish-orange in the examined specimen. The distribution of *G. albatrossae* is from the Sulu Sea to Ryukyu Islands and the recorded depth is 20–70 m but the Indonesian specimen is collected from 290–295 m. Because of these differences, the taxonomic status of this species is uncertain until additional specimens become available for examination in the future.

Family Munididae Ah Yong, Baba, Macpherson & Poore, 2010

***Agononida* Baba & de Saint Laurent, 1996**

***Agononida incerta* (Henderson, 1888)
(Fig. 1B)**

Munida incerta Henderson, 1888: 130, pl. 13, figs. 4, 4a.

Agononida incerta. — Baba et al., 2008: 48 (compilation). — Macpherson & Baba, 2009: 57, figs. 1, 2A–E, G–H. — Baba et al., 2009: 76, figs. 63, 64. — Yaldwyn & Webber, 2011: 211 (list, New Zealand). — Poore & Andreakis, 2012: 7, figs. 2A–C, 3A, B, 4–7. — Dong & Li, 2013: 1324, fig. 2. — Poore & Andreakis, 2014: 209, figs. 2c, 4b. — Macpherson et al., 2020a: 17.

Not *Agononida* sp. aff. *incerta* Poore et al., 2008: 18 (in part, SW Australia). (= *Agononida auscerta* Poore & Andreakis, 2012).

Not *Agononida* aff. *incerta* Macpherson, 2013: 292 (Tarava seamounts and Tuamotu Archipelago) (= *A. polycerta* Poore & Andreakis, 2014).

Type locality. Philippines, off Sibago Island (off Zamboanga), 06°47'N, 122°28'E, 458 m.

Material examined. 2 females, 8.4–10.9 mm cl (MZB Cru 5242), Sunda Strait, between Tabuan Island and Sumatra, Indonesia, 5°44.678'S–5°44.917'S, 104°51.151'E–104°52.061'E, 379–409 m, stn CP07, 25 March 2018; 4 females, 10.8–13.2 mm cl (MZB Cru 5243), Indian Ocean, South of Cilacap, Indonesia, 8°13.038'S–8°13.150'S, 109°07.689'E–109°08.216'E, 290–295 m, stn CP38, 30 March 2018.

Colouration. Base colour of carapace, abdominal somites 2–4 and pereopods pale orange. Pereopods without red bands.

Distribution. Widely distributed in the West Pacific: Japan, Taiwan, Philippines, Indonesia, Papua New Guinea, Australia, New Zealand, Fiji, Tonga, and New Caledonia; depth 70–1,110 m.

***Agononida prolixa* (Alcock, 1894)
(Fig. 1C)**

Munida squamosa var. *prolixa* Alcock, 1894: 322 (Andaman Sea).

Agononida prolixa. — Baba et al., 2008: 51 (compilation). — Macpherson et al., 2020b: 20, fig. 2.

Type locality. Andaman Sea, 344–403 m.

Material examined. 7 males, 7.9–14.7 mm cl, 5 females, 11.6–13.4 mm cl, 1 ovigerous female, 13.2 mm cl (MZB Cru 5244), Sunda Strait, Southwest of Rakata Island, Indonesia, 6°16.066'S–6°14.668'S, 105°15.053'E–105°15.256'E, 257–281 m, stn CP02, 24 March 2018; 4 males, 8.4–9.7 mm cl, 4 females, 9.5–11.4 mm cl (ZRC 2020.0555), 7 males, 9.0–20.1 mm cl, 14 females, 7.3–13.6 mm cl, 1 ovigerous female, 7.2 mm cl (MZB Cru 5245), Sunda Strait, South of Panaitan Island, Indonesia, 6°42.320'S–6°42.879'S, 105°08.682'E–105°09.018'E, 325–362 m, stn CP20, 27 March 2018; 1 male, 6.9 mm cl, 1 female, 6.3 mm cl (RCO CRU 5006), Sunda Strait, South of Panaitan Island, Indonesia, 6°46.458'S–6°47.450'S, 105°07.068'E–105°07.613'E, 864–870 m, stn CP22, 27 March 2018; 1 female, 13.6 mm cl, Sunda Strait, South of Panaitan Island, Indonesia, 6°47.344'S–6°47.914'S, 105°06.039'E–105°06.485'E, 1044–1068 m, stn CP24, 27 March 2018; 5 males, 7.0–9.2 mm cl, 4 females, 8.0–9.6 mm cl (MZB Cru 5246), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia, 7°42.912'S–7°43.255'S, 107°36.559'E–107°37.234'E, 525–312 m, stn CP33, 29 March 2018; 5 males, 10.5–16.0 mm cl, 5 females, 9.9–15.7 mm cl, 3 ovigerous females, 14.8–17.2 mm cl (ZRC 2020.0556); 8 males, 9.5–12.0 mm cl, 7 females, 9.3–12.1 mm cl (MZB Cru 5247), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia, 7°44.464'S–7°44.575'S, 107°39.018'E–107°39.447'E, 243–234 m, stn CP34, 29 March 2018; 6 males, 7.9–11.4 mm cl, 4 females, 8.6–12.0 mm cl (ZRC 2020.0557); 6 males, 8.2–17.7 mm cl, 4 females, 9.9–10.3 mm cl (MZB Cru 5248), Indian Ocean, South of Cilacap, Indonesia, 8°13.038'S–8°13.150'S, 109°07.689'E–109°08.216'E, 290–295 m, stn CP38, 30 March 2018; 1 female, 10.3 mm cl (MZB Cru 5249), Indian Ocean, South of Cilacap, Indonesia, 8°15.885'S–8°16.060'S, 109°10.163'E–109°10.944'E, 528–637 m, stn CP39, 30 March 2018; 5 males, 11.2–14.1 mm cl, 4 females, 9.4–11.2 mm cl, 3 ovigerous females, 15.5–17.5 mm cl (ZRC 2020.0558); 7 males, 9.3–18.1 mm cl, 5 females, 6.5–15.6 mm cl, 5 ovigerous females, 13.6–17.1 mm cl (MZB Cru 5250), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°00.299'S–7°00.393'S, 106°27.247'E–106°26.790'E, 183–255 m, stn CP56, 3 April 2018.

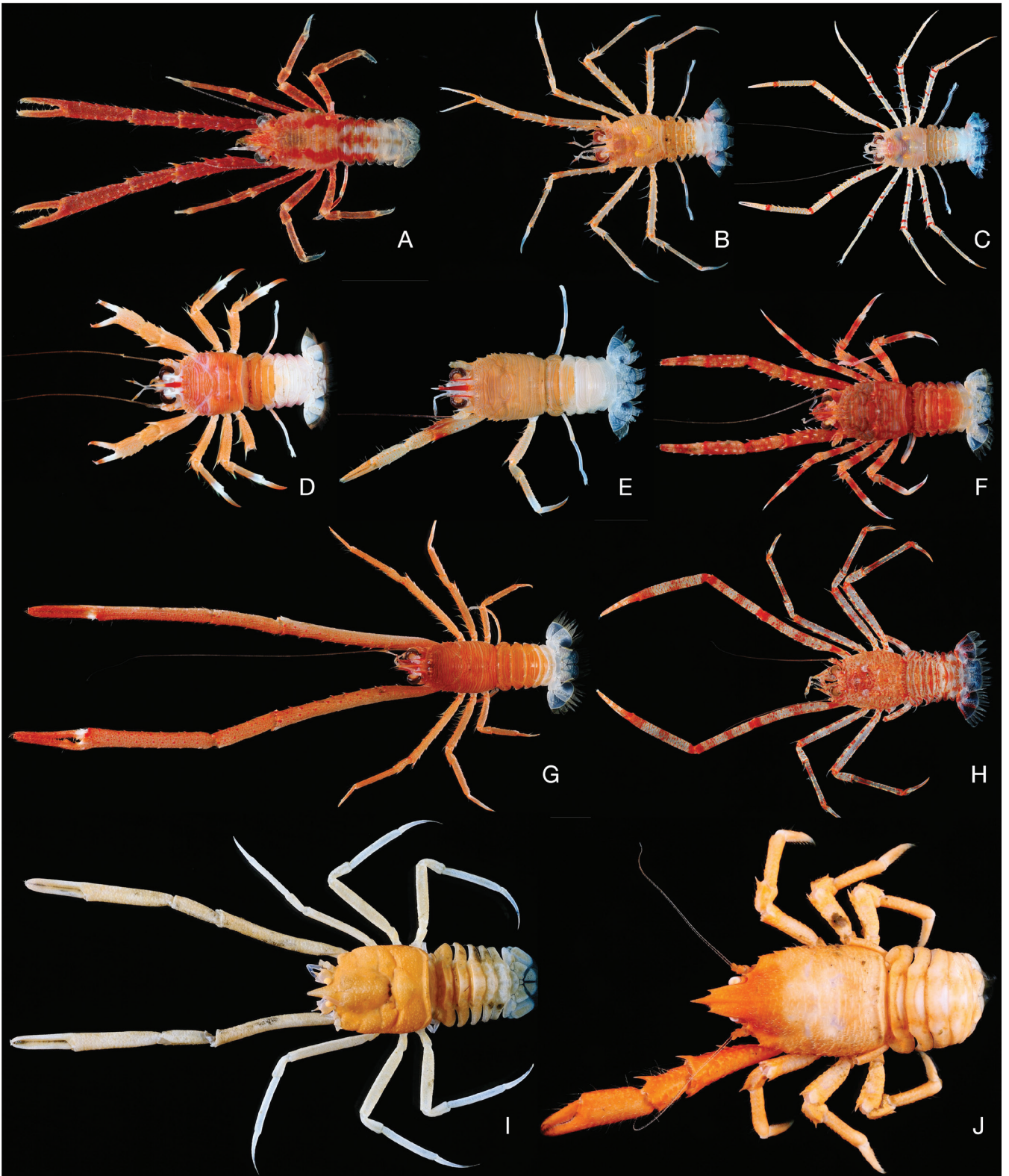


Fig. 1. Galatheidae, Munididae, and Munidopsidae collected during the 2018 SJADES biodiversity cruise. A, *Galathea* sp., CP38, male, 3.8 mm cl; B, *Agononida incerta*, CP7, female, 10.9 mm cl; C, *Agononida proluxa*, CP20, male, 20.1 mm cl; D, *Munida compacta*, CP33, female, 16.1 mm cl; E, *Munida cornuta*, CP20, female, 6.6 mm cl; F, *Munida heteracantha*, CP37, male, 12.5 mm cl; G, *Munida kuboi*, CP34, male, 13.7 mm cl; H, *Paramunida luminata*, CP37, ovig. female, 10.4 mm cl; I, *Munidopsis bruta*, CP55, female, 5.6 mm cl; J, *Munidopsis comarge*, CP40, female, 7.4 mm cl.

Colouration. Carapace, abdominal somites 2–4 and pereopods pale orange. P1 with red band on distal part of merus, proximal part of palm and base of fingers. P2–4 with red band on distal part of merus and propodus.

Distribution. Andaman Sea, Arabian Sea, Gulf of Mannar, W of Nicobar Island, off Quilon, SW India, and Indonesia; depth 183–1,068 m.

Remarks. This is the first record for the species from Indonesia.

Cervimunida Benedict, 1902

Cervimunida princeps Benedict, 1902
(not figured)

Cervimunida princeps Benedict, 1902: 249, fig. 3. — Baba et al., 2008: 59, fig. 3I. — Baba et al., 2009: 92, figs. 75–77. — Kim et al., 2016: 6, figs. 6, 11d.

Type locality. Off Honshu, Japan, 280 m.

Material examined. 1 female, ovigerous, 13.6 mm cl (MZB Cru 5251), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia, 7°42.912'S–7°43.255'S, 107°36.559'E–107°37.234'E, 525–312 m, stn CP33, 29 March 2018.

Distribution. Japan, Korea, East China Sea, Taiwan, Philippines, and Indonesia (this study); depth 76–525 m.

Remarks. This is the first record for the species from Indonesia.

Munida Leach, 1820

Munida andamanica Alcock, 1894
(not figured)

Munida militaris var. *andamanica* Alcock, 1894: 321.

Munida andamanica. — Baba et al., 2008: 85. — Baba et al., 2009: 142, figs. 118, 119. — Macpherson et al., 2020a: 34.

Type locality. Andaman Sea, 344–403 m.

Material examined. 1 female, 16.7 mm cl (RCO CRU 5014), Sunda Strait, South of Panaitan Island, Indonesia, 6°47.344'S–6°47.914'S, 105°06.039'E–105°06.485'E, 1044–1068 m, stn CP24, 27 March 2018; 1 female, 14.8 mm cl, Indian Ocean, East of Tinjil Island, Indonesia, 6°57.221'S–6°56.664'S, 105°54.754'E–105°55.315'E, 517–727 m, stn CP26, 28 March 2018; 1 male, 14.3 mm cl, Indian Ocean, East of Tinjil Island, Indonesia, 6°58.624'S–6°58.937'S, 105°53.745'E–105°53.363'E, 481–557 m, stn CP27, 28 March 2018; 1 male, 9.7 mm cl (MZB Cru 5252), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia, 7°42.912'S–7°43.255'S, 107°36.559'E–107°37.234'E, 525–312 m, stn CP33, 29 March 2018; 1 male, 13.4 mm cl, 1 female, 19.4 mm cl, Indian Ocean, Pelabuhan Ratu Bay, Indonesia,

7°03.322'S–7°03.762'S, 106°26.673'E–106°26.334'E, 383–425 m, stn CP50, 2 April 2018; 2 males, 14.7–17.7 mm cl, Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°01.013'S–7°01.116'S, 106°26.772'E–106°26.421'E, 378–379 m, stn CP55, 3 April 2018.

Distribution. Widely distributed in the Indo-West Pacific: from Madagascar, Mozambique, Andaman Sea, Indonesia, Philippines, Taiwan, Japan, Papua New Guinea, and Australia; depth 141–1,360 m.

Munida compacta Macpherson, 1997
(Fig. 1D)

Munida compacta Macpherson, 1997: 605, fig. 2. — Baba et al., 2008: 90 (compilation). — Macpherson et al., 2020a: 44, figs. 5C, 7A. — Macpherson et al., 2020b: 24, fig. 3.

Type locality. Indonesia, 8°42'S, 131°53'E, 356–368 m.

Material examined. 2 males, 11.0–18.9 mm cl, 2 ovigerous females, 14.9–20.6 mm cl (MZB Cru 5253), Sunda Strait, between Tabuan Island and Sumatra, Indonesia, 5°44.678'S–5°44.917'S, 104°51.151'E–104°52.061'E, 379–409 m, stn CP07, 25 March 2018; 2 males, 13.6–14.4 mm cl, 1 ovigerous female, 13.8 mm cl (MZB Cru 5254), Sunda Strait, South of Umbar Bay, Sumatra, Indonesia, 5°45.399'S–5°46.183'S, 104°56.098'E–104°56.565'E, 429–446 m, stn CP10, 25 March 2018; 2 male, 11.8–16.4 mm cl, 4 ovigerous females, 12.9–17.8 mm cl (MZB Cru 5255), Sunda Strait, South of Panaitan Island, Indonesia, 6°42.320'S–6°42.879'S, 105°08.682'E–105°09.018'E, 325–362 m, stn CP20, 27 March 2018; 1 ovigerous female, 16.7 mm cl (MZB Cru 5256), Sunda Strait, South of Panaitan Island, Indonesia, 6°46.458'S–6°47.450'S, 105°07.068'E–105°07.613'E, 864–870 m, stn CP22, 27 March 2018; 1 ovigerous female, 15.2 mm cl (MZB Cru 5257), Indian Ocean, East of Tinjil Island, Indonesia, 6°57.221'S–6°56.664'S, 105°54.754'E–105°55.315'E, 517–727 m, stn CP26, 28 March 2018; 1 male, 14.8 mm cl, 1 ovigerous female, 15.9 mm cl (RCO CRU 5025), Indian Ocean, East of Tinjil Island, Indonesia, 6°58.624'S–6°58.937'S, 105°53.745'E–105°53.363'E, 481–557 m, stn CP27, 28 March 2018; 3 males, 14.3–16.3 mm cl, 2 females, 10.2–14.0 mm cl, 1 ovigerous female, 12.2 mm cl (ZRC 2020.0559), 6 males, 13.4–17.8 mm cl, 4 females, 12.6–14.8 mm cl, 1 ovigerous female, 14.0 mm cl (MZB Cru 5258), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia, 7°42.912'S–7°43.255'S, 107°36.559'E–107°37.234'E, 525–312 m, stn CP33, 29 March 2018; 1 male, 13.8 mm, 2 females, 12.1–13.2 mm cl (ZRC 2020.0560), 2 males, 13.3–13.9 mm cl (MZB Cru 5259), Indian Ocean, South of Cilacap, Indonesia, 8°15.885'S–8°16.060'S, 109°10.163'E–109°10.944'E, 528–637 m, stn CP39, 30 March 2018; 1 male, 14.4 mm cl (MZB Cru 5260), Indian Ocean, South of Pameungpeuk, Indonesia, 7°47.972'S–7°48.257'S, 107°45.298'E–107°45.706'E, 530–476 m, stn CP47, 1 April 2018; 1 male, 13.5 mm cl, 1 female, 19.7 mm cl (MZB Cru 5261), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°03.322'S–7°03.762'S,

106°26.673'E–106°26.334'E, 383–425 m, stn CP50, 2 April 2018; 2 males, 16.2–18.5 mm cl, 1 female, 14.8 mm cl (MZB Cru 5262), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°01.013'S–7°01.116'S, 106°26.772'E–106°26.421'E, 378–379 m, stn CP55, 3 April 2018.

Colouration. Carapace, pleonal tergites 2 and 3, and appendages reddish or pinkish; pleonal tergites 4–6 and tailfan whitish. Rostrum and supraocular spines reddish. P1 fingers whitish, with reddish tips; distal portion of P2–4 propodi and proximal part of dactyli whitish.

Distribution. India, Papua New Guinea, Indonesia; depth 220–1,021 m.

***Munida cornuta* Macpherson, 1994**
(Fig. 1E)

Munida cornuta Macpherson, 1994: 459, figs. 12, 13c; 2004: 256.
— Baba et al., 2008: 91 (compilation).

Type locality. Kiribati, 600 m.

Material examined. 1 female, 6.6 mm cl, Sunda Strait, South of Panaitan Island, Indonesia, 6°42.320'S–6°42.879'S, 105°08.682'E–105°09.018'E, 325–362 m, stn CP20, 27 March 2018.

Colouration. The ground colour of the carapace, abdomen, and pereopods is orange-reddish, the posterior part of the carapace red. There is one red spot on the distal part of the rostral spine, the fingers of the chelipeds are red, with whitish tips, and the dactylus of the walking legs are whitish.

Distribution. Kiribati, Fiji, Tonga, and Sunda Strait, South of Panaitan Island, Indonesia; depth 325–656 m.

Remarks. This is the first record from Indonesia, which has extended its distribution from the Pacific Ocean to the Indian Ocean.

***Munida heteracantha* Ortmann, 1892**
(Fig. 1F)

Munida heteracantha Ortmann, 1892: 255, pl. 11, figs. 12, 12i, k. — Baba et al., 2008: 99 (compilation). — Castro, 2011: 16. — Macpherson et al., 2020a: 55, fig. 8C.

Type locality. Sagami Bay, Japan; in shallow water.

Material examined. 2 males, 9.4–12.5 mm cl, 3 ovigerous females, 9.0–11.6 mm cl (ZRC 2020.0561); 2 males, 10.7–12.5 mm cl, 1 female, 9.5 mm cl, 4 ovigerous females, 9.5–12.1 mm cl (MZB Cru 5263), Indian Ocean, South of Cilacap, Indonesia, 8°07.462'S–8°07.864'S, 109°05.639'E–109°06.470'E, 163–166 m, stn CP37, 30 March 2018.

Colouration. The ground colour of the carapace, abdomen, and pereopods is orange. The transverse ridges are orange.

The setae on the arm and wrist of the cheliped are reddish orange. The pterygostomial flap and the sternal segments are whitish; eyes are dark brown.

Distribution. Japan, Hong Kong, Philippines, Indonesia, Papua New Guinea, Fiji, and New Caledonia; depth 68–350 m.

***Munida kuboi* Yanagita, 1943**
(Fig. 1G)

Munida kuboi Yanagita, 1943: 20, figs. 5, 6. — Baba et al., 2008: 104 (compilation). — Baba et al., 2009: 169, figs. 149, 150.

Type locality. Toyama Bay, S of Oga, and NW of Niigata, Japan, 78–148 m.

Material examined. 1 male, 6.3 mm cl (RCO CRU 5033), Sunda Strait, South of Panaitan Island, Indonesia, 6°42.320'S–6°42.879'S, 105°08.682'E–105°09.018'E, 325–362 m, stn CP20, 27 March 2018; 2 males, 11.6–13.7 mm cl, 2 females, 6.8–13.8 mm cl, 3 ovigerous females, 11.2–12.2 mm cl (MZB Cru 5264), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia, 7°44.464'S–7°44.575'S, 107°39.018'E–107°39.447'E, 243–234 m, CP34, 29 March 2018; 3 females, 9.1–11.8 mm cl (ZRC 2020.0562), Indian Ocean, South of Cilacap, Indonesia, 8°07.462'S–8°07.864'S, 109°05.639'E–109°06.470'E, 163–166 m, stn CP37, 30 March 2018; 1 ovigerous female, 9.8 mm cl (MZB Cru 5265), Indian Ocean, South of Cilacap, Indonesia, 8°13.038'S–8°13.150'S, 109°07.689'E–109°08.216'E, 290–295 m, stn CP38, 30 March 2018; 2 males, 9.0–13.9 mm cl, 2 females, 13.0–13.4 mm cl (ZRC 2020.0563), 2 males, 10.6–13.2 mm cl, 2 females, 9.4–14.1 mm cl (MZB Cru 5266), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°00.299'S–7°00.393'S, 106°27.247'E–106°26.790'E, 183–255 m, stn CP56, 3 April 2018.

Colouration. Ground colour of carapace, abdominal somites and appendages orange. Rostrum and supraocular spines reddish. Proximal part of P1 fingers whitish.

Distribution. Indonesia, Philippines, Taiwan, and Japan; depth 78–412 m.

***Munida rubridigitalis* Baba, 1994**
(not figured)

Munida rubridigitalis Baba, 1994: 13, fig. 6. — Baba et al., 2008: 117 (compilation). — Macpherson et al., 2020a: 67.

Type locality. Off Central Queensland, 17°51.76'S, 147°07.95'E, 497–503 m.

Material examined. 1 male, 8.3 mm cl, 2 females, 7.6–15.9 mm cl (MZB Cru 5267), Sunda Strait, South of Panaitan Island, Indonesia, 6°42.320'S–6°42.879'S, 105°08.682'E–105°09.018'E, 325–362 m, stn CP20, 27 March 2018; 1 male, 8.7 mm cl (MZB Cru 5268), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia,

7°44.464'S–7°44.575'S, 107°39.018'E–107°39.447'E, 243–234 m, stn CP34, 29 March 2018; 3 males, 9.4–14.9 mm cl, 2 ovigerous females, 11.2–12.1 mm cl (MZB Cru 5269), Indian Ocean, South of Cilacap, Indonesia, 8°13.038'S–8°13.150'S, 109°07.689'E–109°08.216'E, 290–295 m, stn CP38, 30 March 2018.

Distribution. Indonesia, Australia, Papua New Guinea, Vanuatu, New Caledonia, and Loyalty Islands; depth 156–660 m.

***Munida typhle* Macpherson, 1994**
(not figured)

Munida typhle Macpherson, 1994: 549, fig. 60. — Baba et al., 2008: 126 (compilation). — Baba et al., 2009: 200, figs. 181, 182. — Macpherson, 2013: 306. — Macpherson et al., 2017: 54. — Macpherson et al., 2020a: 83.

Type locality. New Caledonia, 24°00.30'S, 168°07.03'E, 1,430–1,470 m.

Material examined. 1 male, 9.2 mm cl (MZB Cru 5270), Indian Ocean, South of Tg. Gede, Java, Indonesia, 7°51.120'S–7°51.718'S, 107°46.245'E–107°46.375'E, 689–637 m, stn CP48, 1 April 2018.

Distribution. Taiwan, Vanuatu, New Caledonia, French Polynesia, Papua New Guinea, Madagascar, and Indonesia (this study); depth 500–1,940 m.

Remarks. This species is recorded for the first time in Indonesia.

***Paramunida* Baba, 1988**

***Paramunida cristata* Macpherson, 2004**
(not figured)

Paramunida cristata Macpherson, 2004: 283, fig. 13. — Baba et al., 2008: 172 (compilation). — Baba et al., 2009: 278, fig. 254. — Cabezas et al., 2010: 20, figs. 12H, 16E.

Type locality. Fiji, 16°05.47'S, 179°27.83'W, 390–403 m.

Material examined. 2 males, 12.3–13.2 mm cl, 2 ovigerous females, 10.1–10.7 mm cl (MZB Cru 5271), Indian Ocean, South of Cilacap, Indonesia, 8°13.038'S–8°13.150'S, 109°07.689'E–109°08.216'E, 290–295 m, stn CP38, 30 March 2018.

Distribution. Fiji, Vanuatu, Taiwan, 390–403 m, and Indonesia; depth 290–295 m.

Remarks. This is the first record of the species from Indonesia.

***Paramunida luminata* Macpherson, 1996**
(Fig. 1H)

Paramunida luminata Macpherson, 1996: 415, figs. 10, 25. — Baba et al., 2008: 173 (list of occurrences). — Cabezas et al., 2010: 27, figs. 13I, 17G. — Macpherson et al., 2020a: 88, fig. 14D. Not *Paramunida luminata* Machordom & Macpherson, 2004: 262 (table) (= *P. antares* Cabezas et al., 2010).

Type locality. Wallis Islands. MUSORSTOM 7: stn 606, 420–430 m.

Material examined. 3 males, 8.3–9.2 mm cl, 3 females, 8.2–9.0 mm cl (ZRC 2020.0564), 5 males, 7.5–10.7 mm cl, 1 female, 8.1 mm cl, 3 ovigerous females, 8.4–10.4 mm cl (MZB Cru 5272), Indian Ocean, South of Cilacap, Indonesia, 8°07.462'S–8°07.864'S, 109°05.639'E–109°06.470'E, 163–166 m, stn CP37, 30 March 2018.

Colouration. Ground colour of carapace and abdominal segments whitish. Cheliped and walking legs whitish, with some red bands, fingers of cheliped whitish, proximal portion of dactyli on walking legs reddish.

Distribution. Wallis Islands, Papua New Guinea, and Indonesia; depth 163–500 m.

Remarks. This is the first record of the species from Indonesia. The present specimen agrees with the original description by Macpherson (1996).

Superfamily Galatheoidea Samouelle, 1819

Family Munidopsidae Ortmann, 1898

***Munidopsis* Whiteaves, 1874**

***Munidopsis andamanica* MacGilchrist, 1905**
(not figured)

Munidopsis wardeni var. *andamanica* MacGilchrist, 1905: 245. *Munidopsis andamanica*. — Baba et al., 2008: 131 (compilation). — Baba et al., 2009: 207, figs. 185–187. — Taylor et al., 2010: 8, figs. 3, 5B–D. — Osawa et al., 2013: 244, fig. 1F. — Macpherson et al., 2020a: 95.

Type locality. E of Andamans, 1,041 m.

Material examined. 3 males, 16.2–23.4 mm cl, 1 ovigerous female, 16.2 mm cl (MZB Cru 5273), Sunda Strait, South of Panaitan Island, Indonesia, 6°46.458'S–6°47.450'S, 105°07.068'E–105°07.613'E, 864–870 m, stn CP22, 27 March 2018; 1 male, 16.6 mm cl, 2 females, 14.1–18.8 mm cl, 1 ovigerous female, 16.7 mm cl (MZB Cru 5274), Sunda Strait, South of Panaitan Island, Indonesia, 6°46.739'S–6°45.924'S, 105°09.239'E–105°08.360'E, 559–571 m, stn CP23, 27 March 2018; 1 female, 15.7 mm cl (MZB Cru 5275), Sunda Strait, South of Panaitan Island, Indonesia, 6°47.344'S–6°47.914'S, 105°06.039'E–105°06.485'E, 1044–1068 m, stn CP24, 27 March 2018; 1 male, 16.5 mm cl, 1 ovigerous female, 18.2

mm cl (ZRC 2020.0565); 2 males, 13.9–23.1 mm cl, 1 female, 14.3 mm cl, 1 ovigerous female, 21.2 mm cl (MZB Cru 5276), Sunda Strait, South of Panaitan Island, Indonesia, 6°50.185'S–6°50.923'S, 105°10.353'E–105°10.776'E, 876–937 m, stn CP25, 27 March 2018; 2 males, 15.7–17.3 mm cl, 1 ovigerous female, 17.6 mm cl (ZRC 2020.0566); 1 male, 20.2 mm cl, 1 ovigerous female, 20.7 mm cl (MZB Cru 5277), Indian Ocean, East of Tinjil Island, Indonesia, 7°00.194'S–6°59.778'S, 105°54.624'E–105°55.224'E, 957–1022 m, stn CP28, 28 March 2018; 1 male, 26.3 mm cl, 1 ovigerous female, 22.6 mm cl (MZB Cru 5278), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia, 7°47.677'S–7°47.681'S, 107°41.904'E–107°42.477'E, 603–686 m, stn CP35, 29 March 2018; 1 female, 11.6 mm cl (RCO CRU 5049), Indian Ocean, South of Pameungpeuk, Indonesia, 7°47.670'S–7°47.151'S, 107°43.126'E–107°43.595'E, 851–684 m, stn CP45, 1 April 2018; 2 males, 7.9–11.1 mm cl (MZB Cru 5279), Indian Ocean, South of Pameungpeuk, Indonesia, 7°47.972'S–7°48.257'S, 107°45.298'E–107°45.706'E, 530–476 m, stn CP47, 1 April 2018; 1 male, 19.1 mm cl, 2 ovigerous females, 17.9–18.4 mm cl (MZB Cru 5280), Indian Ocean, South of Tg. Gedeh, Java, Indonesia, 7°51.120'S–7°51.718'S, 107°46.245'E–107°46.375'E, 689–637 m, stn CP48, 1 April 2018; 1 male, 14.8 mm cl, 1 ovigerous female, 18.2 mm cl (MZB Cru 5281), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°04.874'S–7°05.348'S, 106°25.396'E–106°25.044'E, 569–657 m, stn CP51, 2 April 2018; 1 female, 9.0 mm cl (MZB Cru 5282), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°07.740'S–7°07.819'S, 106°23.719'E–106°23.580'E, 1156–1124 m, stn CP52, 2 April 2018.

Distribution. Andaman Sea, SW Australia, Indonesia, Philippines, Taiwan, Japan, Solomon Islands, New Caledonia, and Vanuatu; depth 270–2,217 m.

***Munidopsis bruta* Macpherson, 2007**
(Fig. 11)

Munidopsis bruta Macpherson, 2007: 46, fig. 22. — Baba et al., 2008: 135. — Baba et al., 2009: 214, figs. 192, 193. — Osawa et al., 2013: 255, figs. 8C, 11B. — Macpherson et al., 2017: 55. — Macpherson et al., 2020a: 97.

Type locality. Solomon Islands, 7°56.2'S, 157°34.07'E, 650–836 m.

Material examined. 2 females, 5.6–6.7 mm cl (MZB Cru 5283), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°01.013'S–7°01.116'S, 106°26.772'E–106°26.421'E, 378–379 m, stn CP55, 3 April 2018.

Colouration. Carapace and abdomen orange; P1–4 pale whitish brown. Corneas pale yellow.

Distribution. Taiwan, Philippines, Indonesia, Papua New Guinea, Solomon Islands, and Mozambique; depth 360–1,203 m.

***Munidopsis comarge* Taylor, Ah Yong & Andreakis, 2010**
(Fig. 1J)

Munidopsis comarge Taylor et al., 2010: 3, fig. 1.
Munidopsis serricornis. — Baba, 2005: 185. — Baba et al., 2009: 257, fig. 234. [Not *M. serricornis* Lovén, 1852]
Munidopsis tridentata. — Baba, 1988: 172, fig. 70. — Komai, 2000: 359. [Not *M. tridentata* (Esmark, 1857)]

Material examined. 1 female, 7.4 mm cl, Indian Ocean, South of Cilacap, Indonesia, 8°18.642'S–8°18.888'S, 109°13.767'E–109°14.476'E, 1078–1091 m, stn CP40, 30 March 2018.

Colouration. Body and pereopods generally pinkish orange, P1 deeper coloured. Corneas pink.

Distribution. Taiwan, Philippines, and Australia and southeastern New Zealand; depth 458–1,470 m (Baba, 1988; Ah Yong, 2014). Now found in southeastern Indonesia.

Remarks. This is a new record for Indonesia. Our specimen agrees with the original description and it can be separated from other allies based on its trifid rostrum with medial carina; carapace with row of epigastric scales and lateral margins unarmed; the width of thoracic sternite 3 is about one-third rather than one-quarter the width of sternite 4; and the dactyli of the walking legs bear a slender corneous spine at the base of the unguis.

***Munidopsis cylindrophthalma* (Alcock, 1894)**
(not figured)

Elasmonotus cylindrophthalmus Alcock, 1894: 333.
Munidopsis cylindrophthalma. — Baba et al., 2008: 139 (compilation). — Baba et al., 2009: 222, figs. 200–202. — Osawa et al., 2013: 262, fig. 8G. — Vaitheeswaran, 2014: 244, figs. 1A–D. — Macpherson et al., 2020a: 99.

Type locality. Andaman Sea, 344–403 m.

Material examined. 1 female, 2.1 mm cl, Sunda Strait, between Tabuan Island and Sumatra, Indonesia, 5°44.678'S–5°44.917'S, 104°51.151'E–104°52.061'E, 379–409 m, stn CP07, 25 March 2018; 2 males, 7.5–8.3 mm cl, 1 ovigerous female, 7.8 mm cl (MZB Cru 5284), Sunda Strait, South of Umbar Bay, Sumatra, Indonesia, 5°45.399'S–5°46.183'S, 104°56.098'E–104°56.565'E, 429–446 m, stn CP10, 25 March 2018; 2 males, 10.8–12.0 mm cl, 2 ovigerous females, 9.7–10.4 mm cl (MZB Cru 5285), Sunda Strait, South of Panaitan Island, Indonesia, 6°42.320'S–6°42.879'S, 105°08.682'E–105°09.018'E, 325–362 m, stn CP20, 27 March 2018; 3 males, 8.3–10.9 mm cl, 1 ovigerous female, 8.6 mm cl (MZB Cru 5286), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia, 7°42.912'S–7°43.255'S, 107°36.559'E–107°37.234'E, 525–312 m, CP33, 29 March 2018; 1 male, 11.0 mm cl (MZB Cru 5287), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia, 7°44.464'S–7°44.575'S, 107°39.018'E–107°39.447'E, 243–234 m, stn CP34, 29

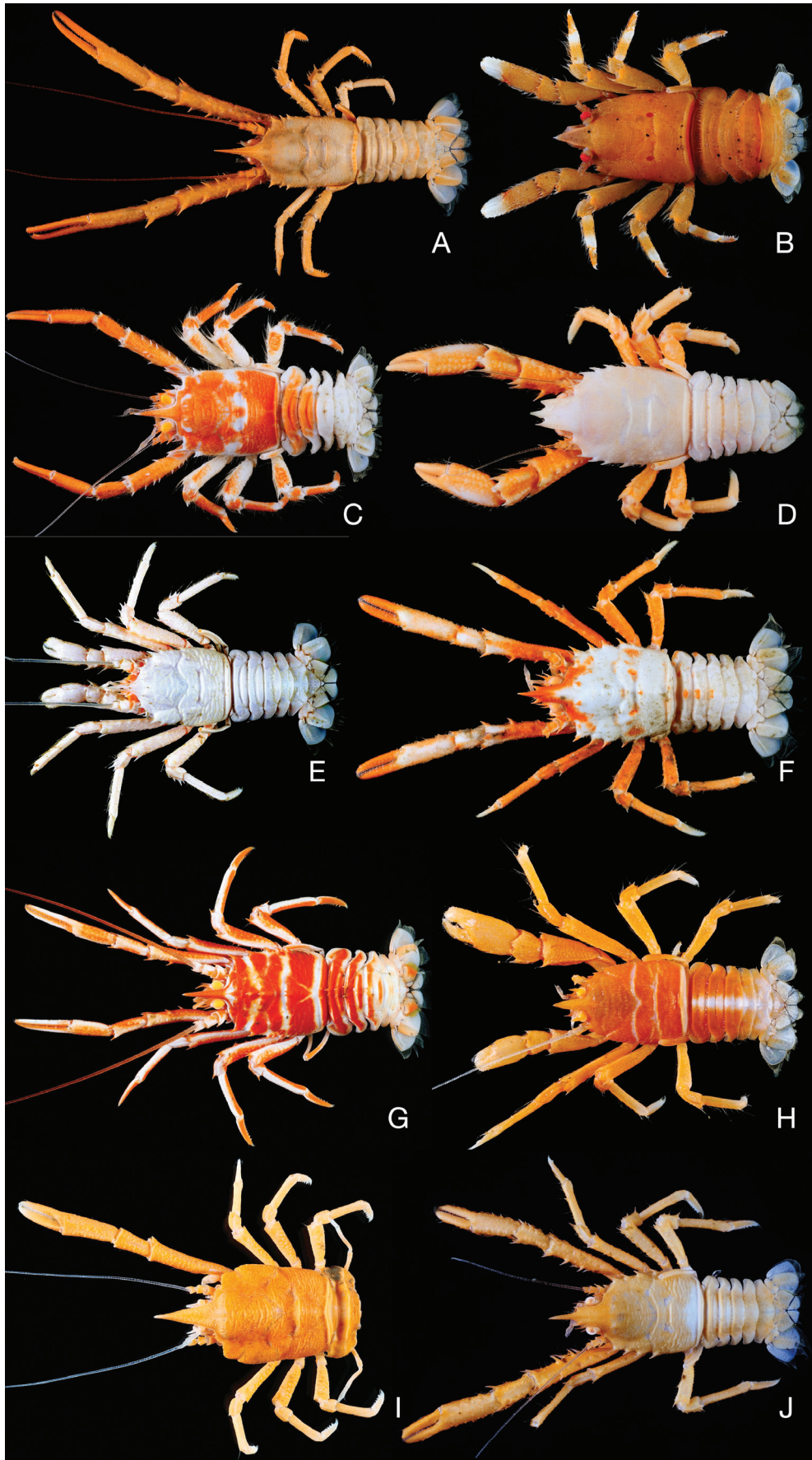


Fig. 2. Munidopsidae collected during the 2018 SJADES biodiversity cruise. A, *Munidopsis dasypus*, CP18, ovig. female, 19.3 mm cl; B, *Munidopsis latimana*, CP34, ovig. female, 9.2 mm cl; C, *Munidopsis lenzii*, CP39, male, 9.8 mm cl; D, *Munidopsis nias*, CP39, male, 7.4 mm cl; E, *Munidopsis nitida*, CP24, male, 19.2 mm cl; F, *Munidopsis regia*, CP24, male, 14.9 mm cl; G, *Munidopsis scobina*, CP33, male, 19.4 mm cl; H, *Munidopsis similior*, CP34, ovig. female, 7.1 mm cl; I, *Munidopsis sinclairi*, CP44, female, 11.2 mm cl; J, *Munidopsis trifida*, CP25, male, 9.1 mm cl.

March 2018; 3 males, 8.7–9.3 mm cl, 1 female, 8.0 mm cl, 1 ovigerous female, 8.3 mm cl (MZB Cru 5288), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°00.299'S–7°00.393'S, 106°27.247'E–106°26.790'E, 183–255 m, CP56, 3 April 2018.

Colouration. Body yellowish-brown to orange-red; abdominal somites 5–6 and telson whitish; rostrum bordered by white or light brown band; pereopods light brown, dactyli whitish.

Distribution. Andaman Sea, Arabian Sea, Maldives, Indonesia, Philippines, Taiwan, Japan, Papua New Guinea, SW Australia, Solomon Islands, Vanuatu, New Caledonia, and Fiji; depth 183–854 m.

***Munidopsis dasypus* Alcock, 1894**
(Fig. 2A)

Munidopsis dasypus Alcock, 1894: 329. — Baba et al., 2008: 139 (compilation). — Baba et al., 2009: 225, fig. 203. — Taylor et al., 2010: 10, figs. 3, 5F. — Komai, 2011: 21, figs. 8–10. — Osawa et al., 2013: 263, figs. 8H, I, 11D–G.

Type locality. Andaman Sea, 1,027 m.

Material examined. 1 female, 14.3 mm cl (MZB Cru 5289), Sunda Strait, Northwest of Rakata Island, Indonesia, 6°02.737'S–6°03.229'S, 105°11.107'E–105°10.642'E, 928–929 m, stn CP05, 24 March 2018; 1 ovigerous female, 19.3 mm cl (MZB Cru 5290), Sunda Strait, between Sumatra & Java, Indonesia, 6°10.758'S–6°11.587'S, 105°05.589'E–105°05.735'E, 1060–1073 m, stn CP18, 26 March 2018; 1 ovigerous female, 24.7 mm cl (MZB Cru 5291), Sunda Strait, South of Panaitan Island, Indonesia, 6°46.739'S–6°45.924'S, 105°09.239'E–105°08.360'E, 559–571 m, stn CP23, 27 March 2018; 1 female, 17.4 mm cl (MZB Cru 5292), Sunda Strait, South of Panaitan Island, Indonesia, 6°50.185'S–6°50.923'S, 105°10.353'E–105°10.776'E, 876–937 m, stn CP25, 27 March 2018; 2 males, 9.4–21.2 mm cl (MZB Cru 5293), Indian Ocean, South of Cilacap, Indonesia, 8°10.065'S–8°09.802'S, 108°37.439'E–108°37.145'E, 1013–970 m, stn CP44, 31 March 2018; 1 male, 14.0 mm cl, beam trawl (RCO CRU 5065), Indian Ocean, South of Pameungpeuk, Indonesia, 7°47.972'S–7°48.257'S, 107°45.298'E–107°45.706'E, 530–476 m, CP47, 1 April 2018.

Colouration. Ground colour of carapace, cheliped, P1–4 and abdominal segments orange. Uropods and telson whitish.

Distribution. Off NE South Africa, Andaman Sea, Arabian Sea, Indonesia, Philippines, Taiwan, Japan, and Australia; depth 214–2,217 m.

***Munidopsis latimana* Miyake & Baba, 1966**
(Fig. 2B)

Munidopsis latimana Miyake & Baba, 1966: 85, figs. 3, 4. — Baba et al., 2008: 147 (compilation). — Baba et al., 2009: 242,

figs. 219, 220. — Osawa et al., 2013: 272, figs. 11H, 14E. — Macpherson et al., 2020a: 104.

Type locality. Tosa Bay, Japan, 250–350 m.

Material examined. 1 male, 12.3 mm cl, 1 ovigerous female, 9.2 mm cl (MZB Cru 5294), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia, 7°44.464'S–7°44.575'S, 107°39.018'E–107°39.447'E, 243–234 m, stn CP34, 29 March 2018; 1 male, 11.6 mm cl (MZB Cru 5295), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°00.299'S–7°00.393'S, 106°27.247'E–106°26.790'E, 183–255 m, stn CP56, 3 April 2018.

Colouration. Yellow, yellow-orange to reddish. Dorsal surface of carapace and abdomen with two pale or whitish longitudinal stripes. Corneas red. P1–4 yellow to reddish, with some white spot and bands.

Distribution. Japan, Taiwan, Philippines, Indonesia, Papua New Guinea, New Caledonia, Vanuatu, and Solomon Islands; depth 135–895 m.

***Munidopsis lenzii* Balss, 1913**
(Fig. 2C)

Munidopsis lenzii Balss, 1913: 222. — Baba et al., 2008: 147 (compilation).

Type locality. Nias, South Canal, W of Sumatra, 0°15'S, 98°08'E, 614 m.

Material examined. 1 male, 9.2 mm cl, 1 ovigerous female, 16.4 mm cl (MZB Cru 5296), Indian Ocean, East of Tinjil Island, Indonesia, 6°57.221'S–6°56.664'S, 105°54.754'E–105°55.315'E, 517–727 m, stn CP26, 28 March 2018; 1 male, 9.8 mm cl (MZB Cru 5297), Indian Ocean, South of Cilacap, Indonesia, 8°15.885'S–8°16.060'S, 109°10.163'E–109°10.944'E, 528–637 m, stn CP39, 30 March 2018.

Colouration. Body pale orange. Rostrum except tip, pale orange. Lateral margins of carapace, epigastric area, cervical groove, and cardiac depressions sometimes whitish. Abdominal somites 5–6 and telson whitish.

Distribution. Only found in Indonesia; depth 517–727 m.

Remarks. This species is described in detail by Macpherson (2007). This is the second record of *M. lenzii* since its original description.

***Munidopsis nias* Ahyong, 2014**
(Fig. 2D)

Munidopsis nias Ahyong, 2014: 204, figs. 4, 5, 9.

Type locality. Off SE Nias, Indonesia, 646 m.

Material examined. 1 male, 7.4 mm cl, Indian Ocean, South of Cilacap, Indonesia, 8°15.885'S–8°16.060'S,

109°10.163'E–109°10.944'E, 528–637 m, stn CP39, 30 March 2018.

Colouration. Body white, pereopods generally yellow orange. Corneas orange pink.

Distribution. Previously known from the eastern Indian Ocean between Nias and the Nicobar Islands, now extended to South Cilacap, Indonesia; depth 528–805 m.

Remarks. This is only the second record of this species since its description. Distinguishing characters of this species include broad and trifold rostrum, carapace smooth and lateral margin with four spines, telson with seven plates and P2–4 meri and carpi distally spinose along extensor margin.

***Munidopsis nitida* (A. Milne Edwards, 1880)**
(Fig. 2E)

Orophorhynchus nitidus A. Milne Edwards, 1880: 59.

Munidopsis nitida. — Baba et al., 2008: 151 (compilation). — Baba et al., 2009: 244, figs. 221, 222 (Taiwan). — Taylor et al., 2010: 14, fig. 4. — Osawa et al., 2013: 273, fig. 14F. — Macpherson et al., 2017: 56. — Farrelly & Ah Yong, 2019: 59, fig. 111. — Macpherson et al., 2020a: 108.

Type locality. Guadaloupe, 1407–1607 m.

Material examined. 1 male, 19.2 mm cl (RCO CRU 5070), Sunda Strait, South of Panaitan Island, Indonesia, 6°47.344'S–6°47.914'S, 105°06.039'E–105°06.485'E, 1044–1068 m, stn CP24, 27 March 2018; 1 male, 20.7 mm cl (MZB Cru 5298), Indian Ocean, South of Cilacap, Indonesia, 8°10.065'S–8°09.802'S, 108°37.439'E–108°37.145'E, 1013–970 m, stn CP44, 31 March 2018; 1 male, 21.8 mm cl (MZB Cru 5299), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°09.610'S–7°10.184'S, 106°18.632'E–106°17.714'E, 1521–1714 m, stn CP53, 2 April 2018.

Colouration. Entire body and pereopods whitish. Corneas orange pink.

Distribution. Widely distributed: Gulf of California, Gulf of Panama, Guadaloupe, Dominica, Brazil, Mozambique, Gulf of Aden, Bay of Bengal, Japan, Taiwan, Philippines, Indonesia, Papua New Guinea, and Australia; depth 340–2,397 m.

***Munidopsis regia* Alcock & Anderson, 1894**
(Fig. 2F)

Munidopsis regia Alcock & Anderson, 1894: 168. — Baba et al., 2008: 157 (compilation). — Osawa et al., 2013: 274, figs. 14I, 17C–F, 18A.

Type locality. Gulf of Mannar, 260–732 m.

Material examined. 1 male, 14.9 mm cl (RCO CRU 5073), Sunda Strait, South of Panaitan Island, Indonesia, 6°47.344'S–6°47.914'S, 105°06.039'E–105°06.485'E, 1044–1068 m, stn CP24, 27 March 2018; 1 female, 12.0 mm cl (MZB

Cru 5300), Indian Ocean, East of Tinjil Island, Indonesia, 6°57.221'S–6°56.664'S, 105°54.754'E–105°55.315'E, 517–727 m, stn CP26, 28 March 2018; 2 males, 14.7–39.1 mm cl, 1 female, 10.2 mm cl (MZB Cru 5301), Indian Ocean, East of Tinjil Island, Indonesia, 6°58.624'S–6°58.937'S, 105°53.745'E–105°53.363'E, 481–557 m, stn CP27, 28 March 2018; 2 males, 10.8–21.2 mm cl, 2 females, 17.4–27.6 mm cl (MZB Cru 5302), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia, 7°42.912'S–7°43.255'S, 107°36.559'E–107°37.234'E, 52–312 m, stn CP33, 29 March 2018; 1 female, 19.7 mm cl (MZB Cru 5303), Indian Ocean, South of Pameungpeuk, Indonesia, 7°47.716'S–7°47.905'S, 107°44.896'E–107°45.190'E, 654–540 m, stn DW46, 1 April 2018; 1 ovigerous female, 38.1 mm cl (RCO CRU 5078), Indian Ocean, South of Pameungpeuk, Indonesia, 7°47.972'S–7°48.257'S, 107°45.298'E–107°45.706'E, 530–476 m, stn CP47, 1 April 2018; 2 males, 33.6–36.2 mm cl (MZB Cru 5304), Indian Ocean, South of Tg. Gedeh, Java, Indonesia, 7°51.120'S–7°51.718'S, 107°46.245'E–107°46.375'E, 689–637 m, stn CP48, 1 April 2018; 3 males, 12.3–22.8 mm cl (ZRC 2020.0567), 2 males, 15.5–29.5 mm cl, 1 female, 29.6 mm cl (MZB Cru 5305), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°03.322'S–7°03.762'S, 106°26.673'E–106°26.334'E, 383–425 m, stn CP50, 2 April 2018; 4 males, 5.4–12.1 mm cl, 5 females, 6.0–12.9 mm cl (MZB Cru 5306), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°04.874'S–7°05.348'S, 106°25.396'E–106°25.044'E, 569–657 m, stn CP51, 2 April 2018; 1 female, 18.5 mm cl (MZB Cru 5307), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°07.740'S–7°07.819'S, 106°23.719'E–106°23.580'E, 1156–1124 m, stn CP52, 2 April 2018; 1 male, 14.7 mm cl (MZB Cru 5308), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°01.013'S–7°01.116'S, 106°26.772'E–106°26.421'E, 378–379 m, stn CP55, 3 April 2018.

Colouration. Colour in life chalky pink.

Distribution. Gulf of Mannar, Maldives, Arabian Sea, Andaman Sea (260–741 m), Indonesia, and Philippines; depth 52–1,156 m.

***Munidopsis scobina* Alcock, 1894**
(Fig. 2G)

Munidopsis scobina Alcock, 1894: 330. — Baba et al., 2008: 158 (compilation). — Thirumilu, 2011: 1, figs. 1, 2. — Vaitheeswaran, 2017: 407, figs. 2–6.

Type locality. Andaman Sea, 439 m.

Material examined. 4 males, 16.1–18.1 mm cl (ZRC 2020.0568); 7 males, 15.2–19.4 mm cl (MZB Cru 5309), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia, 7°42.912'S–7°43.255'S, 107°36.559'E–107°37.234'E, 525–312 m, stn CP33, 29 March 2018; 7 males, 15.1–18.4 mm cl, 1 female, 8.2 mm cl (ZRC 2020.0569); 8 males, 16.1–19.3 mm cl, 1 female, 8.5 mm cl, 1 ovigerous female, 9.7 mm cl (MZB Cru 5310), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°1.013'S–7°01.116'S, 106°26.772'E–106°26.421'E, 378–379

m, stn CP55, 3 April 2018; 2 males, 7.6–18.5 mm cl (MZB Cru 5311), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°00.299'S–7°00.393'S, 106°27.247'E–106°26.790'E, 183–255 m, stn CP56, 3 April 2018.

Colouration. The colour of carapace and edges of abdominal segments is orange with white horizontal bands. The P2–4 orange with white bands.

Distribution. Arabian Sea, Bay of Bengal, Andaman Sea, and Indonesia; depth 183–1,046 m.

Remarks. The material examined agrees quite well with the description of *M. scobina* provided by Baba (1988). The Indonesian specimen examined by Macpherson (2007) showed that the second and third abdominal segments each has two or three spines on the anterior and posterior ridges. In the present material, the spines on the second and third abdominal segments ranged from one to three. The fourth abdominal segment has one or two spines on the anterior ridge, while the posterior ridge has either a single spine or none at all.

***Munidopsis similior* Baba, 1988**
(Fig. 2H)

Munidopsis similior Baba, 1988: 164, fig. 65. — Baba et al., 2008: 159 (compilation). — Baba et al., 2009: 260, figs. 236–238. — Osawa et al., 2013: 281, figs. 111–K, 18C, D. — Macpherson et al., 2017: 56. — Macpherson et al., 2020a: 113.

Type locality. NE of Legazpi Lt., off SE Luzon, 131°2'N, 123°49'18"E, 267 m.

Material examined. 1 female, 5.1 mm cl, 2 ovigerous females, 4.5–4.9 mm cl (MZB Cru 5312), Sunda Strait, South of Umbar Bay, Sumatra, Indonesia, 5°45.399'S–5°46.183'S, 104°56.098'E–104°56.565'E, 429–446 m, stn CP10, 25 March 2018; 2 females, 3.1–4.2 mm cl (ZRC 2020.0570), Sunda Strait, South of Panaitan Island, Indonesia, 6°42.320'S–6°42.879'S, 105°08.682'E–105°09.018'E, 325–362 m, stn CP20, 27 March 2018; 3 males, 4.4–7.9 mm cl, 2 ovigerous females, 5.3–7.1 mm cl (MZB Cru 5313), Indian Ocean, South of Tg. Boyongkareuceng, Indonesia, 7°44.464'S–7°44.575'S, 107°39.018'E–107°39.447'E, 243–234 m, CP34, 29 March 2018; 1 male, 5.9 mm cl (MZB Cru 5314), Indian Ocean, South of Pameungpeuk, Indonesia, 7°47.972'S–7°48.257'S, 107°45.298'E–107°45.706'E, 530–476 m, stn CP47, 1 April 2018.

Colouration. Ground colour of body orange; distal articles of pereopod, abdominal somite 6, uropods and telson whitish. Corneas orange.

Distribution. Mozambique, Madagascar, Indonesia, Philippines, Taiwan, Papua New Guinea, Solomon Island, Vanuatu, and Fiji; depth 198–1,775 m.

***Munidopsis sinclairi* McArdle, 1901**
(Fig. 2I)

Munidopsis (Elasmonotus) sinclairi McArdle, 1901: 524.

Munidopsis sinclairi. — Baba et al., 2008: 161 (compilation). — Baba et al., 2009: 262, figs. 239, 240. — Osawa et al., 2013: 282, fig. 18E. — Macpherson et al., 2017: 56. — Macpherson et al., 2020a: 114.

Type locality. Off S coast of Sri Lanka, 1,610 m.

Material examined. 1 female, 11.2 mm cl, 1 ovigerous female, 11.2 mm cl (MZB Cru 5315), Indian Ocean, South of Cilacap, Indonesia, 8°10.065'S–8°09.802'S, 108°37.439'E–108°37.145'E, 1013–970 m, stn CP44, 31 March 2018; 2 ovigerous females, 11.3–12.6 mm cl (MZB Cru 5316), Indian Ocean, Pelabuhan Ratu Bay, Indonesia, 7°09.610'S–7°10.184'S, 106°18.632'E–106°17.714'E, 1521–1714 m, stn CP53, 2 April 2018.

Colouration. Ground colour of body and pereopod orange-brown; grooves on carapace, median part of rostrum, uropods and telson whitish. Corneas orange-brown.

Distribution. Madagascar, Seychelles, South coast of Sri Lanka, Indonesia, Philippines, Taiwan, Papua New Guinea, Solomon Islands, Vanuatu, and New Caledonia; depth 527–2,217 m.

***Munidopsis trifida* Henderson, 1885**
(Fig. 2J)

Munidopsis trifida Henderson, 1885: 415; 1888: 156, pl. 17, figs. 2, 2a. — Baba et al., 2008: 167 (compilation). — Baba et al., 2009: 271, figs. 248, 249. — Guzman & Sellanes, 2015: 299, fig. 11. — Macpherson et al., 2017: 56. — Macpherson et al., 2020a: 116.

Type locality. Straits of Magellan, 51°27'30"S, 74°03'W, 732 m.

Material examined. 2 males, 15.1–23.8 mm cl (RCO CRU 5092), Sunda Strait, South of Panaitan Island, Indonesia, 6°46.739'S–6°45.924'S, 105°09.239'E–105°08.360'E, 559–571 m, stn CP23, 27 March 2018; 1 male, 9.1 mm cl (MZB Cru 5317), Sunda Strait, South of Panaitan Island, Indonesia, 6°50.185'S–6°50.923'S, 105°10.353'E–105°10.776'E, 876–937 m, stn CP25, 27 March 2018; 1 male, 18.7 mm cl (RCO CRU 5094), Indian Ocean, South of Pameungpeuk, Indonesia, 7°47.972'S–7°48.257'S, 107°45.298'E–107°45.706'E, 530–476 m, stn CP47, 1 April 2018; 2 males, 9.1–11.2 mm cl, 1 female, 7.5 mm cl, 1 ovigerous female, 18.5 mm cl (MZB Cru 5318), Indian Ocean, South of Tg. Gedeh, Java, Indonesia, 7°51.120'S–7°51.718'S, 107°46.245'E–107°46.375'E, 689–637 m, stn CP48, 1 April 2018.

Colouration. Carapace and abdomen orange, with irregular pale coloured patches, telson and uropods whitish. P1 entirely reddish orange, P2–4 orange pink with lighter coloured patches.

Distribution. W coast of Chile, Mozambique, Madagascar, SE coast of Arabia, Andaman Sea, Indonesia, South China Sea, Taiwan, Japan, Papua New Guinea, Solomon Islands, and New Caledonia; depth 289–1,057 m.

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