

Size. Ovigerous females 18.5–27.0 mm, non-ovigerous females 16.0–23.0 mm.

Variation. Indonesian specimens are generally wider than Australian specimens, but width ranges of the two populations overlap. In all Australian specimens the uropod exopod is longer and narrower than the endopod, while in Indonesian specimens the uropod rami are most commonly subequal in length.

Remarks. The strongly produced and acute posterolateral margins of pleonite 5, weakly produced antennule article 3, antenna extending to the posterior of pereonite 2, and weakly developed nodules on the posterior margin of the dactylus of pereopods 1–4 all serve to identify this species.

The types of *Anilocra carpentariensis* were not made available for study, but Avdeev's (1977) figures agree

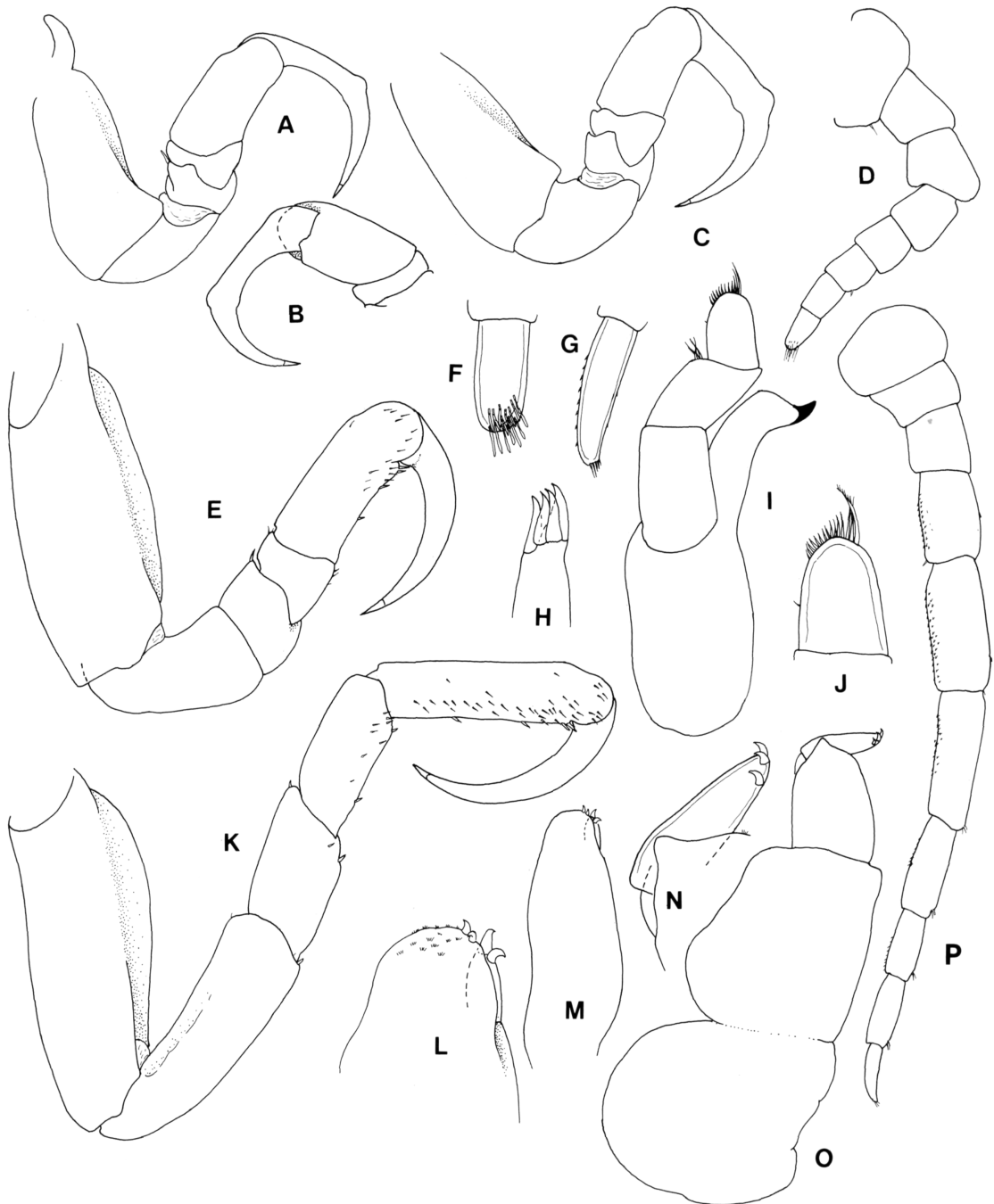


Fig. 10. *Anilocra dimidiata*, A–C, E, H–K, female, AM P36279, remainder female, AM P36276. A, pereopod 1; B, pereopod propodus, medial view; C, pereopod 2; D, antennule; E, pereopod 6; F, antennule apex; G, antenna apex; H, maxillule apex; I, mandible; J, mandible palp, article 3; K, pereopod 7; L, maxilla apex; M, maxilliped; N, maxilliped article 3; O, maxilliped; P, antenna.

with the characters listed above, and the species is here synonymised with *A. dimidiata*.

Hosts. *Psettus evansi** (Monodactylidae) (Nierstrasz, 1915); *Leiognathus bindus*, positioned dorsal to the eye; and unspecified *Nemipterus* spp.

Distribution. Indonesia; Vietnam (Monod, 1934); Philippines (Richardson, 1910). Wessell Islands, Gulf of Carpentaria and Townsville in Australia. The numerous unconfirmed records suggests that this species may have a wider distribution.

Anilocra leptosoma Bleeker

Figs 12, 13

Anilocra leptosoma Bleeker, 1857: 21, 30, pl. 1, fig. 6.—
Schiodte & Meinert, 1881: 108, pl 8 figs 2-4.

Unconfirmed records or citations: Gerstaecker, 1882: 261; Stebbing, 1900: 640; 1905: 26; Nierstrasz, 1915: 87; 1931: 129; Monod, 1933: 196, fig. 62/3; Barnard, 1925: 392; 1936: 165, fig. 7c,d,e; Boone, 1935: 213, pl. 62; Serène 1937: 69; Pillai, 1954: 14; Kensley, 1978: 78, fig. 32C; Trilles, 1979: 248.

Not *A. leptosoma*: Monod, 1934: 11, pls 19, 22A, B, 23, 24B; Trilles, 1975: 310, pl. 1, fig. 6 (= *Anilocra caudata*).

Material examined. LECTOTYPE: female (ovig 27.0), Batavia (= Jakarta), Indonesia, coll. Bleeker (RMNH 30). Bleeker

(1857) stated that he examined four specimens. At present only one specimen appears to be extant, and in some respects does not agree with Bleeker's figure. This specimen, as the only known type specimen for the species is here designated as lectotype.

Non-type: female (ovig 26.0), Philippines, Salmin (RMNH 4955) (examined by Schiodte & Meinert, 1881). From *Nematalosa come*, Qld: female (non-ovig 30.0), Cleveland Bay, Townsville, 19 March 1983, above left operculum (QM W12177); 2 females (ovig 32.0, non-ovig 24.0), Rose Bay, northern Qld, 23 May 1983, above left operculum (QM W12178); female (ovig 27.0), Townsville, 4 Oct 1983 (AM P36280); all coll. B. Ingram. Female (non-ovig 21.0), King Park, Beaver Rocks boat ramp, Mary River, south-east Qld, 10 April 1982, above and posterior to eye, coll. N.L. Bruce & E.J. Fields (QM W11005). Female (non-ovig 20.0), Cape Bowling Green, Northern Qld, 1914, ex *Dorosoma nasus** (name unconfirmed), coll. R. Hamlyn-Harris (QM W9481). Female (non-ovig 19.5), upper Brisbane River, south-east Qld, 7 Oct 1974, ex 'Bony Bream' *Fluviolosa erebi**, coll. R. Harrison (QM W4878).

Type locality. Djakarta, Indonesia (Bleeker, 1857).

Description of Australian female. Body about 3.3 times as long as wide. Dorsum domed, coxae just visible in dorsal view. Rostrum broad; eyes large, about 0.5 width of cephalon. Coxae narrow. Pleonite 1 short, ventrolateral margin produced; pleonites 2-5 subequal

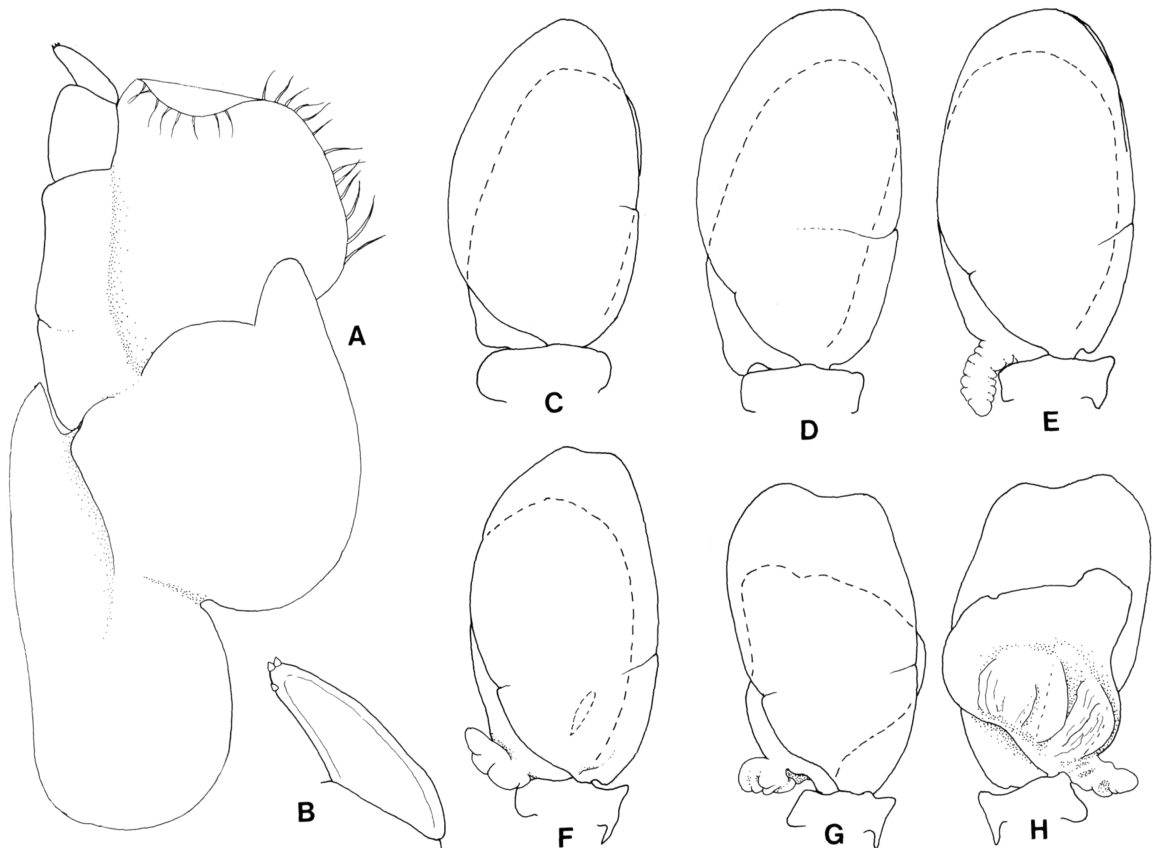


Fig. 11. *Anilocra dimidiata*, female, AM P36279. A, maxilliped; B, maxilliped article 3; C-G, pleopods 1 to 5 respectively; H, pleopod 5, posterior view.

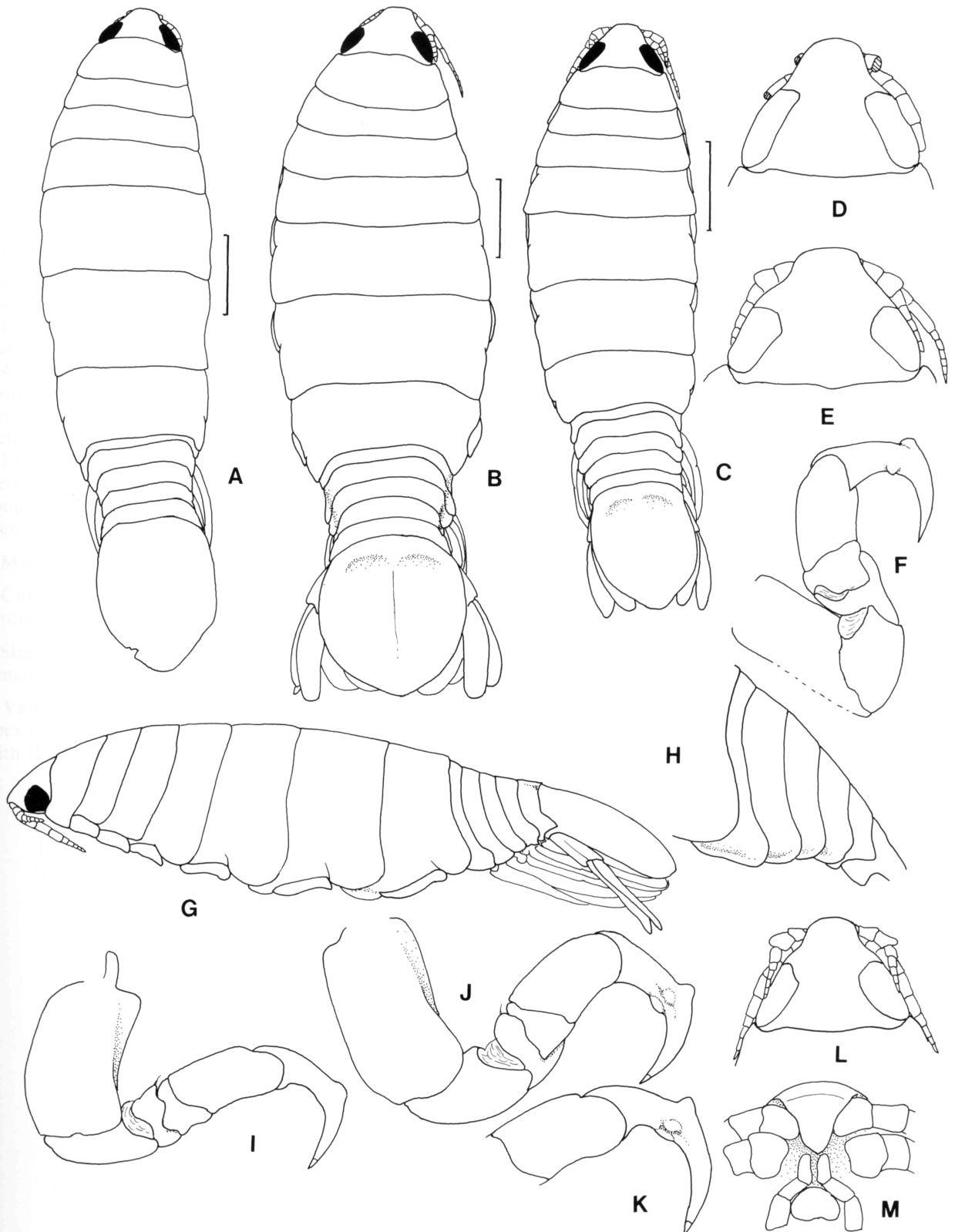


Fig. 12. *Anilocra leptosoma*. A, D, F, H, Lectotype RMNH 30; B, E, H, female 32.0 mm, Rose Bay; C, L, female 24.0 mm, Rose Bay; remainder female 27.0 mm (AM P36280). A, dorsal view; B, dorsal view; C, dorsal view; D, cephalon; E, cephalon; F, pereopod 2, in situ; G, lateral view; H, pleon, lateral view; I, pereopod 7; J, pereopod 2; K, pereopod 4, dactylus; L, cephalon; M, frons. Scale lines represent 4.0 mm.

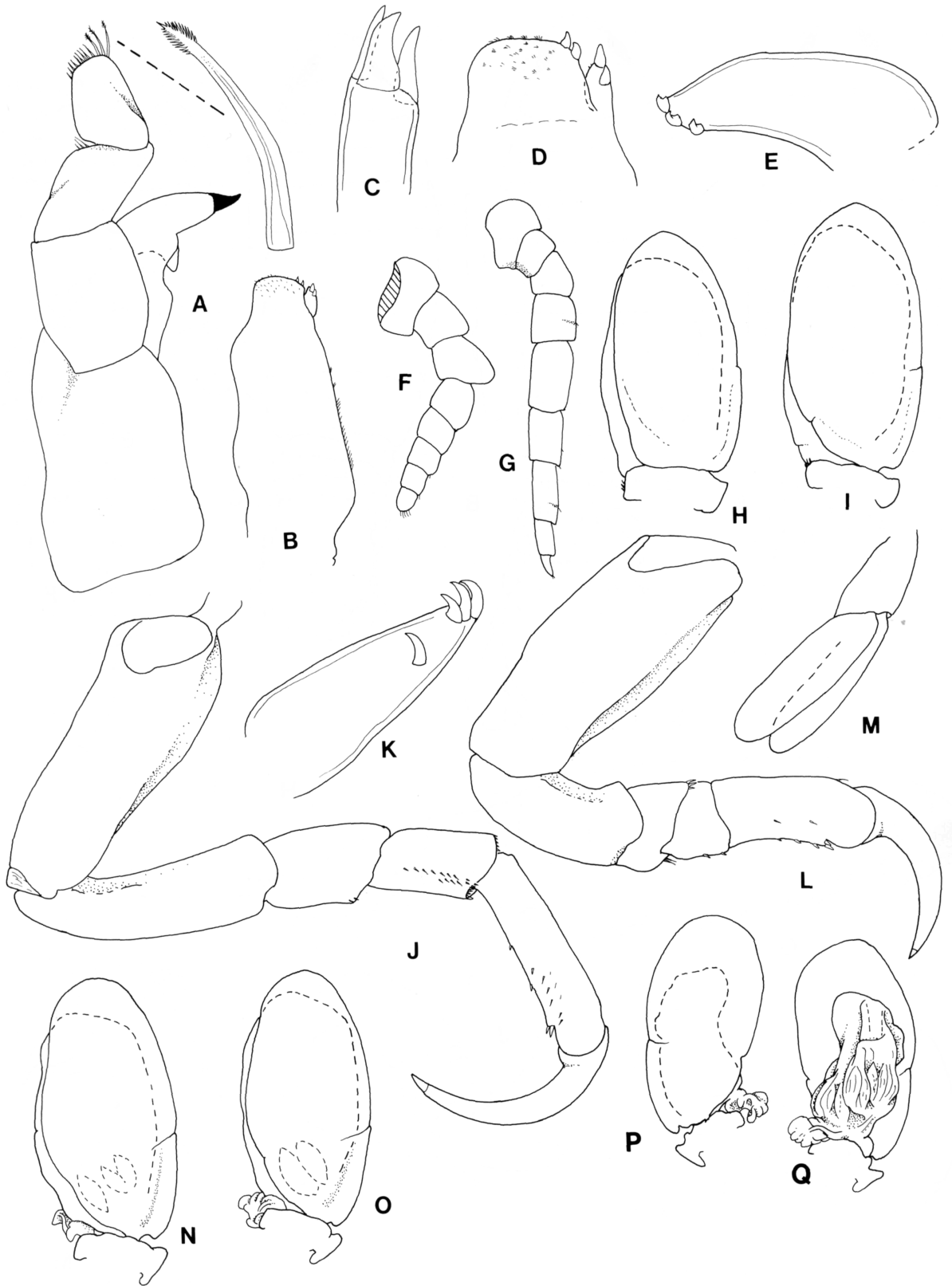


Fig. 13. *Anilocra dimidiata*. All figures female 27.0 mm (AM P36280) except where indicated. **A**, mandible; **B**, maxilla; **C**, maxillule apex; **D**, maxilla apex; **E**, maxilliped article 3; **F**, antennule; **G**, antenna; **H**, pleopod 1; **I**, pleopod 2; **J**, pereopod 7; **K**, maxilliped article 3, female 30.0 mm, Cleveland Bay; **L**, pereopod 6; **M**, uropod; **N-P**, pleopods 3 to 5; **Q**, pleopod 5, posterior view.

in length; lateral margins of pleonites 2–4 not produced; pleonite 5 dorsal posterolateral margins weakly produced. Pleotelson lateral margins convex, converging smoothly to medial point; lateral margins not folded up. Anterodorsal depression and mediolongitudinal ridge weakly developed, latter scarcely evident.

Antennule with 8 articles, extending slightly beyond midpoint of eye; anterodistal angle of article 3 strongly produced. Antenna with 9 articles, extending to middle or posterior of pereonite 2.

Maxilla medial lobe small. Mandible palp with 13 brush-tipped setae on distal margin of article 3. Maxilliped article 3 with 3 terminal spines.

Pereopod 1 dactylus with nodule on anterior margin, that of posterior margin scarcely developed. Pereopods 2–4 similar to 2, but increasing in length towards posterior; dactylus nodules prominent, anterior nodule large, proximal side steeply inclined, distal side gently inclined; posterior margin with 2 small nodules.

Endopods of pleopod 3 and 4 with 2 small folds; pleopod 5 endopod highly folded. Uropod peduncle about half length of endopod; exopod slightly shorter than endopod, apices of both rami rounded.

Male. Not known.

Colour. Pale tan to brown in alcohol; chromatophores over dorsal surface.

Size. Ovigerous females 26.0–32.0 mm, non-ovigerous females 21.0–24.0 mm.

Variation. In some specimens the uropod exopod apex is subacute. All Australian material accords well with the lectotype. Non-ovigerous female has 4 long

spines on maxilliped article 3.

Remarks. Characters which serve best to identify this species are antennule article 3 being only moderately produced, pleonite 1 short, posterolateral corners of pleonites 4 and 5 not produced, flat and markedly ovate pleotelson with a distinct apex (occasionally forming a caudomedial lobe), rounded uropods, pereopod 1 with moderate nodules, and pereopods 2–4 with prominent anterior nodule and 2 posterior nodules.

Anilocra monoma is very similar, and can be separated only by the pereopod nodules being far less strongly developed, and the ventrolateral margins of pleonite 1 not posteriorly produced. Examination of the types of *A. monoma* showed one specimen had 2 weak nodules on the posterior margin of the dactylus of pereopod 3, as in *A. leptosoma* (see Fig. 14).

Anilocra alloceraea Koelbel, had long been considered a synonym of *A. leptosoma*. Comparison of Indonesian material to Koelbel's figure readily identified the species, and it can be distinguished from *A. leptosoma* by the far narrower body, far more strongly produced antennule article 3, more strongly developed nodules on the dactyls of pereopods 1–4, pleonite 1 being much longer, and pleotelson lateral margins strongly turned up with the posterior margin bisinuate.

Hosts. In Australia recorded from *Nematolosa come*, in marine waters, and *Nematolosa erebi* estuarine waters.

Distribution. Recorded from the Philippines (Schiödt & Meinert, 1881), Indonesia (Bleeker, 1857) and eastern Australia from Townsville to Brisbane.

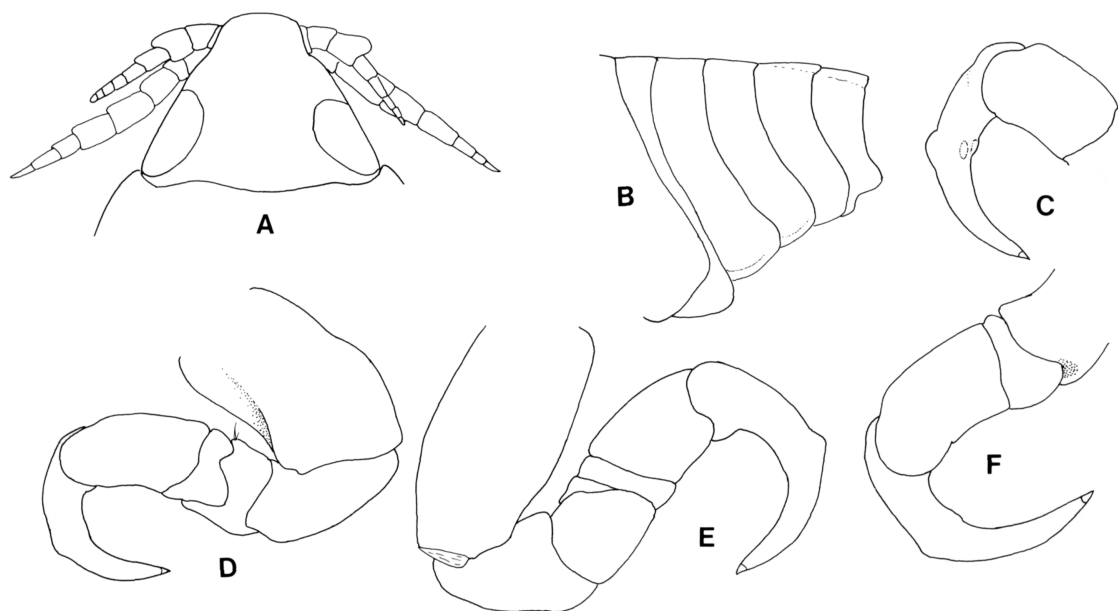


Fig. 14. *Anilocra monoma*, holotype (USNM 190881). A, cephalon; B, pleon, lateral view; C, pereopod 3 dactylus, perspective; D, pereopod 1; E, pereopod 3; F, pereopod 4.

Anilocra nemipteri n. sp.

Figs 15, 16, 17

Anilocra cavicauda.—Hale, 1926: 210, fig. 7; Beumer, et al., 1982: 31, 58 (not *A. cavicauda* Richardson, 1910).

Material examined. HOLOTYPE: female, (29.0 ovig), Northwest Shelf, WA, 18°54'S, 118°12'E, 6 June 1983, ex *Nemipterus virgatus*, silty sand bottom, coll. G.C.B. Poore

& H.M. Lew Ton on FRV *Soela* (NMV J12947).

PARATYPES: 35 females [ovig 31.0 (NMV J12948), 22.5 (NMV J12950), 21 unmeasured, non-ovig 28.5 (NMV J12949), 25.0 (NMV J12951), 11 unmeasured], same data as holotype (NMV J11181). Female (ovig 27.5), near Mornington Island, Gulf of Carpentaria, Qld, 16°51'S, 139°51'E, 24 Jan 1983, 15 m, coll. C. Jones, QFS (QM W11335). Female (ovig 20.5), Torres Strait Prawn Survey, 1983, QFS (QM W10845). Lizard

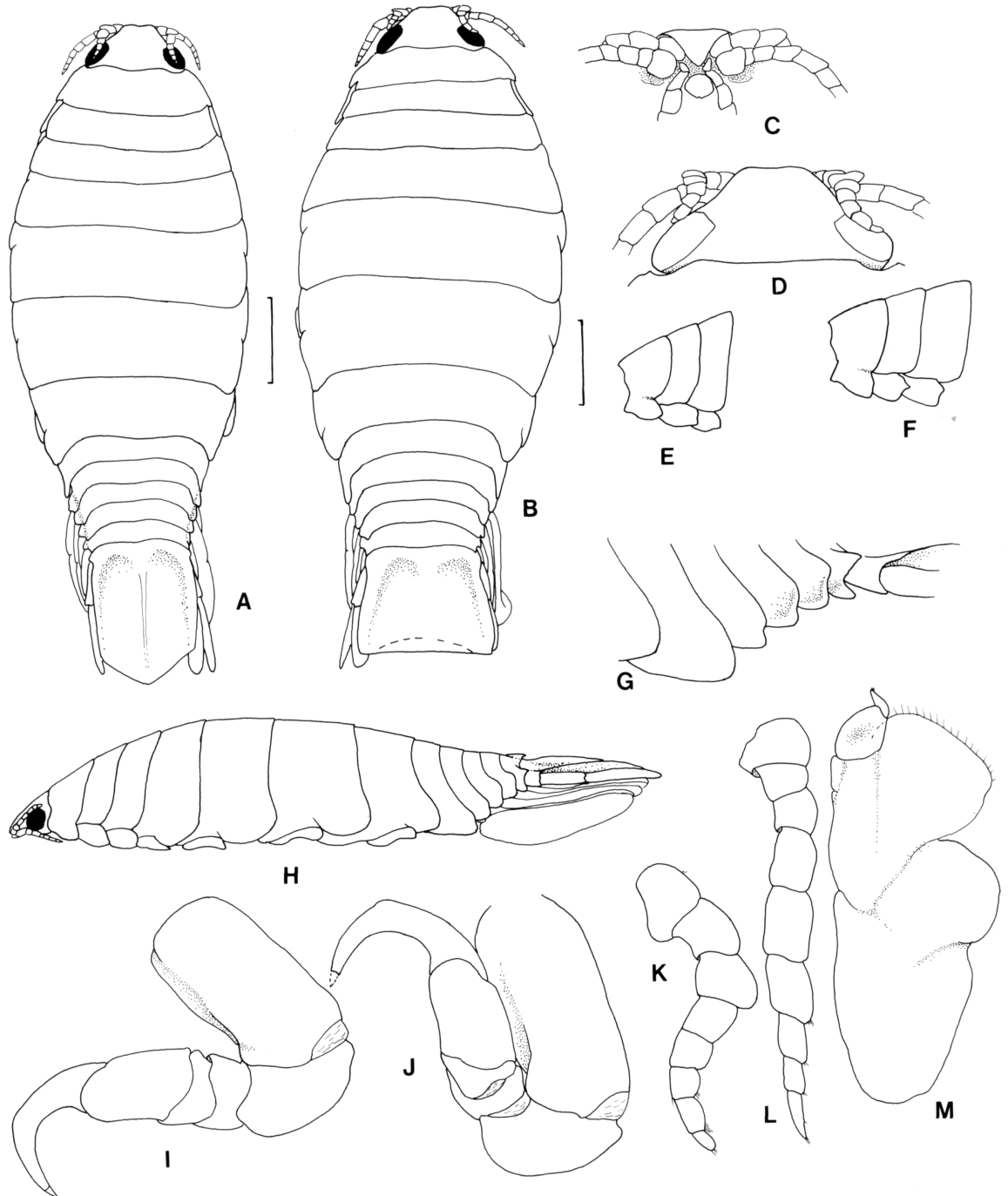


Fig. 15. *Anilocra nemipteri* n. sp., A, C, G, H, holotype; F, female #3, remainder female #1 (NMV J11181). A, dorsal view; B, dorsal view; C, frons; D, cephalon; E, anterior pereonites; F, anterior pereonites; G, pleon; H, lateral view; I, pereopod 1; J, pereopod 2; K, antennule; L, antenna; M, maxilliped. Scale lines represent 4.0 mm.

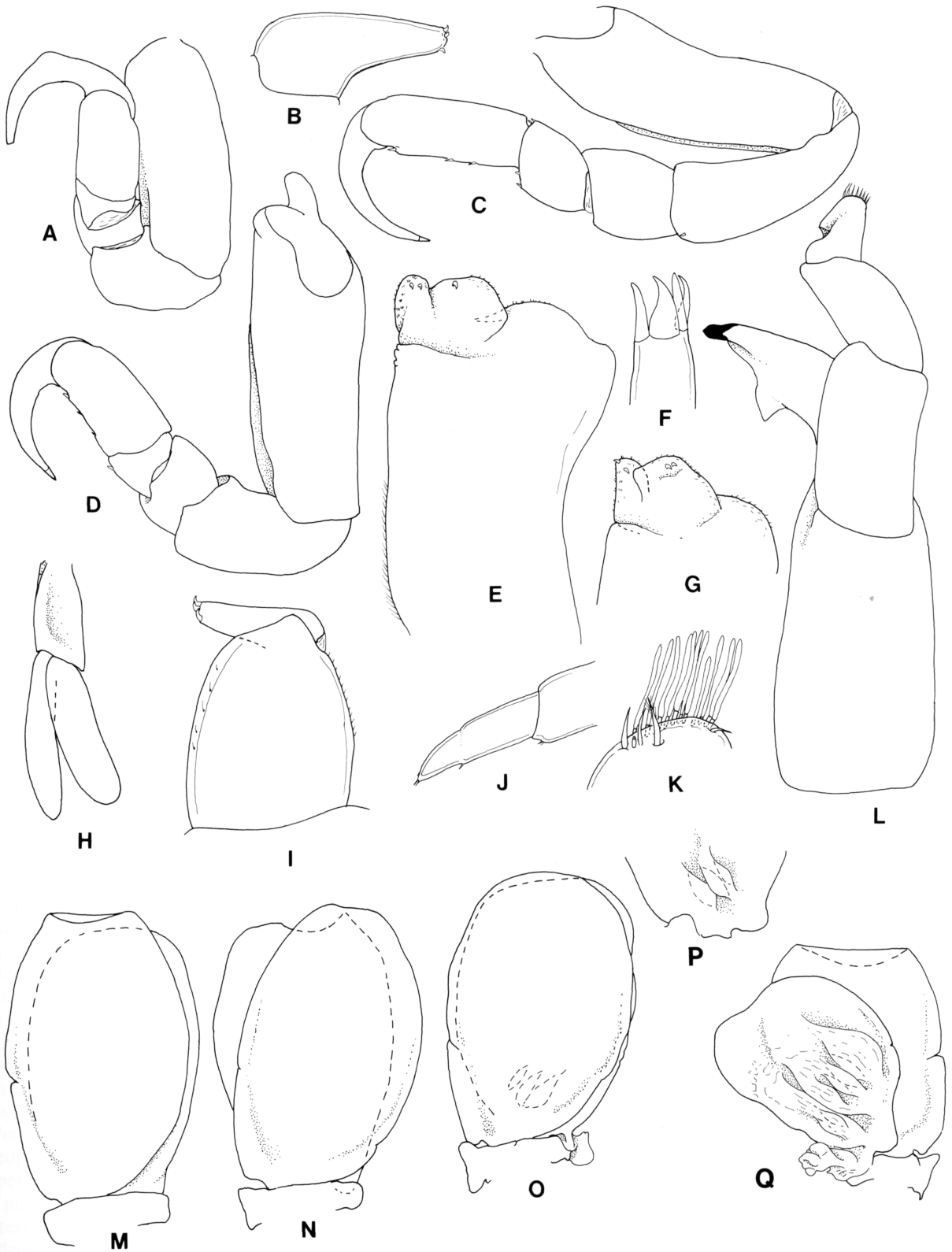


Fig. 16. *Anilocra nemipteri* n. sp., G, I, female #3, remainder female #1 (NMV J11181). **A**, pereopod 3; **B**, maxilliped article 3; **C**, pereopod 7; **D**, pereopod 6; **E**, maxilliped; **F**, maxillule apex; **G**, maxilla apex; **H**, uropod; **I**, maxilliped; **J**, antennule, terminal article; **K**, antenna, terminal article detail; **L**, mandible; **M-O**, pleopods 1 to 3 respectively; **P**, pleopod 3 endopod, posterior lobes; **Q**, pleopod 5, posterior view.

Island, Qld, northern Great Barrier Reef series - from *Scolopsis bilineatus*: female (damaged, ovig 19.0), Osprey Is., 15 July 1985, 15 m (AM P36254); male (7.0), Granite Bluffs, Lizard Island, 20 July 1985, 7 m (AM P36256); 3 females (ovig 22.0, non-ovig 13.0, immature 8.0), Osprey Is., 22 July 1985, from 3 hosts, 5 m (QM W12179); 2 females (ovig 23.0, 22.0), northern end of Granite Bluffs, Lizard Island, 23 July 1985, 2 hosts, 7 m (AM P36255); female (ovig 21.5), north-west side

of Palfrey Is., 24 July 1985, 8 m (QM W12180); female (ovig 22.0), patch reef in front of Research Station, Lizard Island, 24 July 1985, 2 m (AM P36253); from *Scolopsis margaritifer*: 2 males (9.0, 7.5), north-west side of Palfrey Is., 23 July 1985, 2 hosts, 7 m (AM P36257); male (6.0), north-west side of Palfrey Island, 24 July 1985, 8 m (AM P36252); all coll. N.L. Bruce & R.T. Springthorpe.

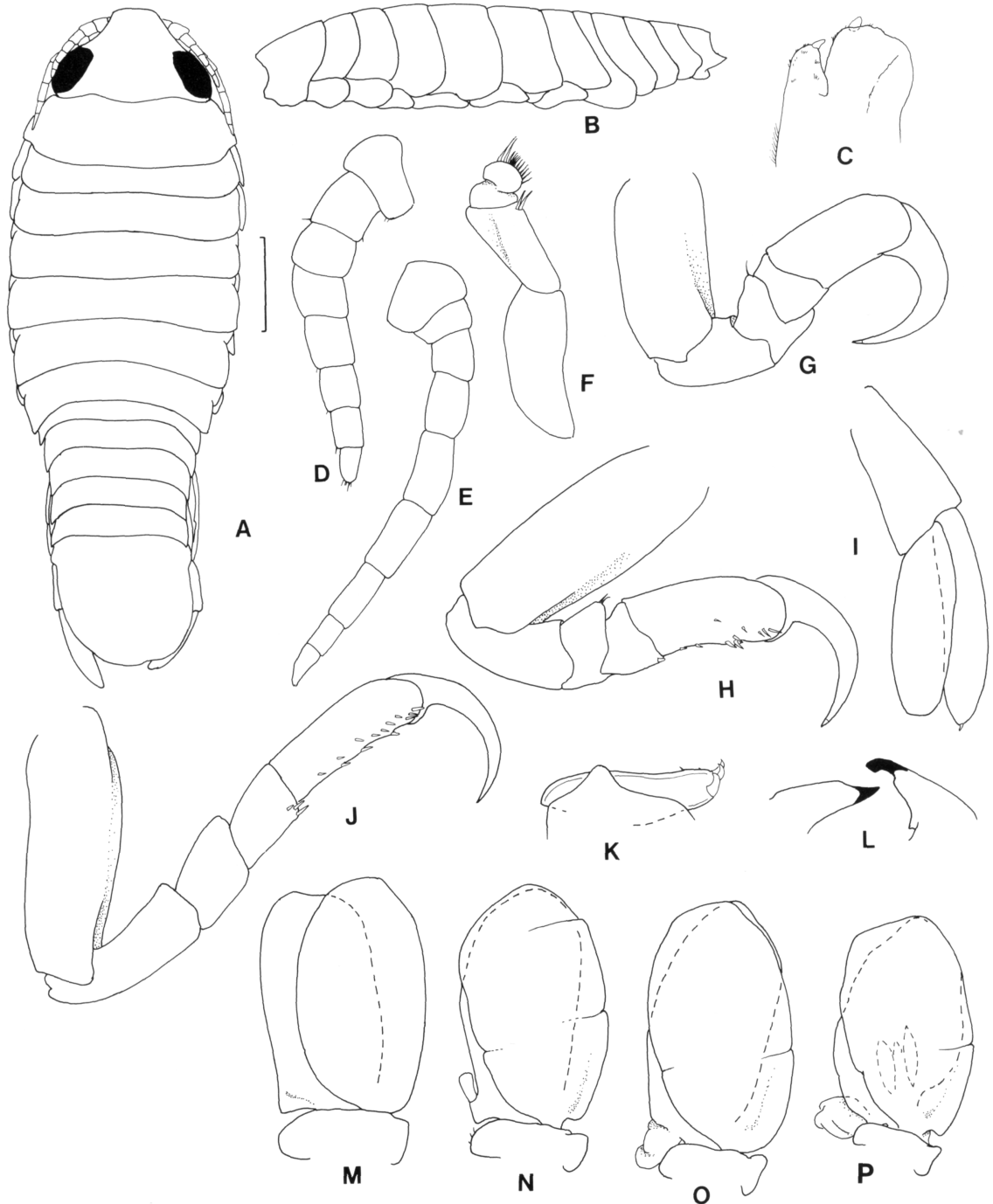


Fig. 17. *Anilocra nemipteri* n. sp., male 7.0 mm, Lizard Is. (AM P36256). A, dorsal view; B, pereon, pleon, lateral view; C, maxilla apex; D, antennule; E, antenna; F, mandible palp; G, pereopod 1; H, pereopod 6; I, uropod; J, pereopod 7; K, maxilliped article 3; L, right and left mandible incisors respectively; M-P, pleopods 1 to 3, 5 respectively. Scale line represents 1.0 mm.

Additional material. Two females, Northwest Shelf, WA, 19°58.7'S 117°00'E, 26 Oct 1983, depth 40 m, coll. T. Ward (NTM Cr4243). 10 females, Northwest Shelf, WA, 20°24.6'S 116°13.0'E, 9 June 1983, ex *Pristotis jerdoni*, 36 m, shelly sand bottom, coll. G.C.B. Poore & H.M. Lew Ton on FRV *Soela* (NMV J11182). Female, N.N.E. of Montebello Is., WA, 19°44'S 116°02'E, 3 March 1979, depth 105 m, coll. L.L. Marsh & S. Slack-Smith on FRV *Soela* (WAM 602-85). Female, east of Montebello Is., WA, 20°30'S 116°00'E, 2 Dec 1979, depth 37.5 m, coll. S. Slack-Smith & L. Marsh on FRV *Soela* (WAM 606-85). Female, south-western coast of Hermite Island, Montebello Is., WA, 12 Dec 1979, dredged 6 m, L. Marsh & S. Slack-Smith on FRV *Soela* (WAM 605-85). Female, 142 km north of Cape Lambert, WA, 19°06'S 117°17'E, 1 Oct 1982, depth 156 m, coll. L. Marsh on FRV *Soela* (WAM 601-85). 8 females, CSIRO Gulf of Carpentaria Prawn Survey, Qld, 30 Nov 1963, from *Odontoglossus tolu**, coll. D. F. McMichael (AM P36281). 8 females, CSIRO Gulf of Carpentaria Prawn Survey, Qld, Dec 1963, no other data, coll. J.C. Yaldwyn & D.F. McMichael (AM P36282). 7 females, CSIRO Gulf of Carpentaria Prawn Survey, from various trawled fishes (*Nemipterus**), no other data (AM P36283). 2 females, (ovig 31.0, 29.0), Gulf of Carpentaria Prawn Survey, 6 Oct 1964, coll. R.W. George on *Rama* (WAM 597-85). Female, north side of Clack Reef, Qld, 14°03'S 144°15'E, 24 Feb 1979, ex *Scolopsis bilineatus*, coll. AIMS, QM, AM (QM W8937). Female (ovig 17.5), north-eastern point, Fantome Island, Palm Group, Qld, 20 April 1986, 18 m, on *Pentapodus setosus*, coll. N.L. Bruce, R.T. Springthorpe (AM P36747). Male (7.0), 19 Apr 1986, on *Scolopsis monogramma*, all data as previous (AM P36748).

Type locality. North West Shelf, WA, 18°54'S, 118°12'E.

Description of female. Body 2.4–3.0 times as long as wide, lateral margins convex in dorsal view. Rostrum not abruptly narrowed, anterior margin medially indented. Eyes about 0.3 width of cephalon. Pleonite 1 longest, posterolateral margin indented, then posteriorly produced; posterolateral margins of pleonites 2–4 very thin; dorsal posterolateral angles of pleonite 5 not produced. Pleotelson lateral margin bent dorsally, posterior margin abruptly angled with wide caudomedial lobe.

Antennule extending to midpoint of eye, with 8 articles, anterodistal margin of article 3 produced. Antenna extending to middle of pereonite 1, with 10 articles.

Mandible palp article 3 folded, with 9 terminal setae. Maxillule with 4 terminal spines. Maxilla medial lobe with 2 small spines, lateral with 1. Maxilliped article 3 with terminal spines.

Pereopods robust; nodule present on dactylus of pereopods 1–4, weakly developed on pereopod 1 distinct on pereopods 2 to 4. Pereopods 6 and 7 each with spine on posterodistal angle of carpus and 3 spines on posterior margin of propodus.

Pleopods broadly rounded; endopods of pleopods 3 and 4 with 3 small lobes, endopod of pleopod 5 with 3 large folded lobes; proximomedial lobe of pleopods 3–5 endopods prominent and folded. Uropods not extending beyond posterior of pleotelson, rami subequal in length, endopod wider than exopod.

Male. Rostrum not indented. Pleonite 1 posterolateral

margin weakly produced. Pleotelson posterior margin evenly rounded, lateral margins not turned up. Antennule article 3 not produced. Mandible assymmetrical, right incisor acute, left blunt. Pereopods 1–4 without nodules on dactylus; pereopods 6 and 7 with propodus more spinose than female. Pleopod folding weakly developed.

Colour. In life, densely covered by chromatophores; on *Scolopsis bilineatus* and *S. margaritifer* appearing very dark brown; pale tan on *S. monogramma* and *Pentapodus setosus*. Preserved specimens vary from pale tan to dark brown.

Size. Ovigerous females 19.0–31.0 mm, non-ovigerous females 13.0–28.5 mm; males 6.0–9.0 mm.

Variation. Body width varies from 2.4–3.0 times as long as wide. The folding on the endopods of pleopods 3 and 4 is less developed in non-ovigerous and small specimens under about 25 mm. The shape of the posterior margin of the pleotelson is frequently irregular, often appearing damaged.

Specimens from *Pristotis jerdoni* are smaller in size (ovigerous females measuring 16.5–21.0 mm), have the posterolateral margins of pleonite 5 slightly more acute, and lack the indentation at the posterolateral margin of pereonite 1.

Specimens from *Scolopsis bilineatus* taken at Lizard Island are consistently wider than those from *Nemipterus*, but are otherwise identical.

Remarks. This species can be recognised by the broad ovate body shape, short antennule and antenna, weakly developed pereopod nodules on the dactylus anterior margin, and pleonite 1 long with posteriorly directed posterolateral margins.

Hosts. *Nemipterus virgatus*, *N. tolu**, *Scolopsis bilineatus*, *S. margaritifer*, *S. monogramma*, *Pentapodus setosus*, *Pristotis jerdoni*. On nemipterids at Lizard Island and the Palm Group, there was only ever one isopod per host, always attached above and slightly posterior to the eye.

Distribution. North West Shelf of Western Australia, Gulf of Carpentaria, Torres Strait; Lizard Island and Palm Group of the Great Barrier Reef.

Etymology. The name is derived from that of the most common host genus.

Anilocra soelae n. sp.

Figs 18, 19

Material examined. All North West Shelf, WA, collected by FRV *Soela*. HOLOTYPE: female, (ovig 16.0), 19°03.5'S 119°03.6'E, 28 April 1983, depth 80 m, coll. A.J. Bruce (NTM Cr4244).

PARATYPES: 3 females (15.5, 15.5, non-ovig 14.0), same data as holotype (NTM Cr4244). Female (ovig 15.5), 18°56.8'S 118°45.2'E, 7 Dec 1982, depth 86 m, coll. T. Ward (AM P36272). Female (ovig 15.0), 19°44.0'S 117°54.6'E, 20 Sept 1983, depth 56 m, coll. T. Ward (AM P36271).

Type locality. North West Shelf, Western Australia, 19°03.5'S 119°03.6'E.