

Contribution to the knowledge of Leucosiidae I. The identity of *Leucosia craniolaris* (Linnaeus, 1758), and redefinition of the genus *Leucosia* Weber, 1795 (Crustacea: Brachyura)

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A study of the genus *Leucosia* Weber, 1795, led to the establishment of the identity of the type species, *L. craniolaris* (Linnaeus, 1758), designation of a neotype and redefinition of the genus. *Leucosia* is now restricted to 4 species: the type species *L. craniolaris* (Linnaeus, 1758), *L. punctata* Bell, 1855, *L. moresbiensis* Haswell, 1880, and a new species, *L. rubripalma*. They differ from all other species heretofore assigned to the genus in having first male pleopod with a screw-like tightly coiled shaft, terminating in a setose muff. The species are described or redescribed and illustrated, extended synonymies are given, and a key for their identification is provided.

Introduction

The genus *Leucosia* Weber, 1795 was established for *Cancer craniolaris* Linnaeus, 1758, from "Asia" (Linnaeus, 1758: 626). It has been widely held that "in *Leucosia*, numerous as the species are, not only the essential characters of the parts on which the generic distinction usually depends, but also the general features of the whole form, are remarkably similar in all the species" (Bell, 1855b: 282). Seventy-nine species were assigned to *Leucosia*, their authors having disregarded the variation in the segmentation of the male abdomen, the presence of thick pubescent patches on carapace and chelipeds, the structure of the first male pleopod, the presence and form of the thoracic sinus, and other morphological features.

A study of the extensive collections of the Nationaal Natuurhistorisch Museum, Leiden (formerly Rijksmuseum van Natuurlijke Historie), together with other major collections (listed below) has enabled re-examination of many type specimens and much of the published material, and led to the establishment of the identity of the type species, *L. craniolaris* (Linnaeus, 1758), designation of a neotype and redefinition of the genus *Leucosia*. Only three previously described species: the type species *L. craniolaris* (Linnaeus, 1758), *L. punctata* Bell, 1855, *L. moresbiensis* Haswell, 1880, and a new species, *L. rubripalma*, are retained in *Leucosia* sensu stricto. They differ from all other species heretofore assigned to the genus in having the first male pleopod with a screw-like tightly coiled shaft, terminating in a setose muff. All species are described or redescribed and illustrated, extended synonymies are given, and a key for their identification is provided. Following contributions will discuss the placement of the other species assigned to the genus.

Abbreviations: cl. = carapace length, measured along the vertical median line of

the carapace; coll. = collected by; Exp. = expedition; id. = identified by; I. = Island; Is. = Islands; stn = station.

The material examined was lent by the following institutions: the Museum für Naturkunde, Berlin (MNB); Muséum national d'Histoire naturelle, Paris (MNHN); the Natural History Museum, London (NHM); the National Science Museum, Tokyo (NSMT); the Queensland Museum, Brisbane (QM); the Nationaal Natuurhistorisch Museum, Leiden (formerly Rijksmuseum van Natuurlijke Historie) (RMNH); the National Museum of Natural History, Smithsonian Institution, Washington, D.C. (USNM); Western Australian Museum, Perth (WAM); the Zoological Museum, Amsterdam (ZMA); and the Zoologisk Museum, København (ZMK).

Leucosia Weber, 1795 s.s.

Diagnosis.— Carapace subovoid, globose; hepatic region tumescent; regions of carapace indistinct. Dorsal surface of carapace glabrous, smooth or punctate. Front produced, projecting beyond epistome, postfrontal region laterally concave. Antennular fossa continuous with orbit, sealed by basal antennular segment; antennules fold obliquely within fossa. Antenna short, inserted between antennular fossa and orbit. Orbita small, rounded, outer orbital margin unisutured, anterior margin of efferent branchial channel forms part of lower orbital margin. Eyes retractable. External maxillipeds concealing trapezoid buccal opening; in female, endopod with setose fringe lengthwise, ischium medially carinate. Anterolateral margin of carapace carinate, beaded. Lateral angle of carapace beaded, overhanging thoracic sinus. Thoracic sinus deep, anteriorly Y-shaped, ventral margin bearing row of perliform granules. Postero-lateral margins of carapace rounded. Epimeral ridge invisible or partially visible in dorsal view, narrowing posteriorly, margin evenly milled throughout, meeting posterior margin at wide angle. Posterior margin prominent, beaded. Chelipeds subequal, robust, longer in adult male than in female specimens. Cheliped merus trigonal, bearing perliform tubercles on anterior, posterior margins, upper surface bearing coalesced cluster of 6-8 granules proximally, followed by two diverging rows of granules, lower surface coarsely granulate anteriorly, pitted proximally. Carpus inflated. Propodus 1.5 times as long as wide, its upper margin prominently carinate. Fingers 0.75 times as long as propodus, gaping proximally, upper margin of dactyl carinate. Pereiopods slender, short. Pereiopodal propodi 2-4 keeled dorsally, 5th propodi keeled dorsally and ventrally; dactyli longer than propodi, laterally flattened, lanceolate. Male abdominal sulcus deep, elongate, nearly reaching buccal cavity; its lateral margin bearing distinct ridge fitting into suture between abdominal segments. Male abdomen with 2nd segment minute; segments 3-5 fused, vertically furrowed proximally; 6th segment bearing denticle medially; telson triangular. Female abdomen with segments 3-6 fused, greatly enlarged, shield-like, telson triangular. First male pleopod elongate; shaft tightly-coiled, slightly sinuous, proximal aperture wide; conical, cor-nute apical process hidden within swollen setose muff. Second male pleopod short, curved, apex scoop-like.

Type species.— *Cancer craniolaris* Linnaeus, 1758, by subsequent designation Holthuis, 1959.

Remarks.— Holthuis (1959: 106) established that Weber (1795), rather than Fabri-

cius (1798), is the author of *Leucosia*, declared *Leucosides* Rathbun (1897) its junior synonym, and selected *Cancer craniolaris* Linnaeus (1758: 626) as the type species of the *Leucosia* Weber, 1795. Holthuis also fixed Rumphius' illustration (pl. 10, fig. B) as the type of Linnaeus species, as according to the Code the expression "the type" is equivalent with lectotype if used before 2000 (Code, ed. 4, p. 82, Art. 74.5; Holthuis, pers. com.). That drawing depicts a species with a sinuous anterolateral margin of the carapace, tumescent hepatic regions and a prominently raised front. However, the identity of *C. craniolaris* remained ambiguous though Holthuis (1959: 105) wrote with characteristic optimism "it will probably prove possible to solve the identity of the type of *Leucosia craniolaris* (L.)".

Linnaeus (1758: 626) offered a notoriously brief and inadequate description of *Cancer craniolaris*, consisting all of nine words: "C. brachyurus, thorace laevi integerim ovato glaberrimo, minibus ancipitibus laevi" and based the species on Rumphius' (1705, pl. 10, figs A, B) and Petiver's (1713, pl. 9, fig. 3 = pl. 10, fig. B of Rumphius) illustrations of *Cancellus Anatum* from the Malay Archipelago. In a later publication Linnaeus (1764: 431) identified specimens from the cabinet of Louisa Ulrika, now in Uppsala Museum, as *Cancer craniolaris*. Only one of the specimens (no. 238) fits Rumphius' illustration, the other (no. 239) was identified from photographs as *L. unidentata* de Haan, 1841. Herbst (1783) called attention to the fact that Rumphius' drawings represent two distinct species and reserved the name *Cancer craniolaris* for fig. B. However, the specimen identified by Herbst as *C. craniolaris* and preserved in the Zoological Museum, Berlin (ZMB Herbst 2183), was identified from a photograph as *L. vittata* Stimpson, 1858.

With only an obscure description and lacking a name-bearing type specimen for the type species, I resorted to Rumphius' illustration to determine the identity of *Cancellus Anatum Secundus*. In the interests of resolving confused identities and stabilizing the nomenclature I hereby designate the specimen identified by Linnaeus (1764: 431) as *C. craniolaris* and deposited at the Uppsala University, Zoological Museum (UUZM #238) as neotype.

The genus *Leucosia* s.s., differs from other leucosiid crabs in having the first male pleopod with a screw-like tightly coiled shaft, terminating in a setose muff.

Key to species of the genus *Leucosia* s.s.

1. Frontal margin medially emarginate; epibranchial region laterally granulate; posterolateral margin beaded throughout, terminating in granulate cluster; pterygostomian region laterally granulate; 3rd thoracic sternite bearing granulate band *L. punctata*
- Frontal margin tridenticulate; epibranchial region punctate; posterolateral margin beaded anteriorly, lacking granulate cluster; pterygostomian region and 3rd thoracic sternite smooth 2
2. Posterior margin of carapace laterally expanded, forming prominent lobes; floor of thoracic sinus granulate throughout, sinus anteriorly defined by rectangular margin of pterygostomian region; upper surface of cheliped merus distally granulate; pereiopodal carpi dorsally carinate *L. rubripalma* spec. nov.
- Posterior margin of carapace not expanded laterally; floor of thoracic sinus

- smooth, anteriorly defined by rounded margin of pterygostomian region; upper surface of cheliped merus distally smooth; pereiopodal carpi dorsally rounded ... 3
3. Dorsal surface of carapace coarsely punctate; 2 or 3 perliform granules above cheliped basis... *L. moresbiensis*
- Dorsal surface of carapace minutely punctate anteriorly, smooth posteriorly; row of 4 perliform granules above cheliped basis, followed by smaller granules *L. craniolaris*

Leucosia craniolaris (Linnaeus, 1758)

(figs. 1A, 2A, B)

Cancellus Anatum Secundus, Rumphius, 1705: 27, pl. 10 fig. B.

Cancellus Anatum 2, Petiver, 1713, pl. 9, fig. 3.

Cancer craniolaris Linnaeus, 1758: 626; Linnaeus, 1764: 431 (p.p.); Fabricius, 1775: 402 (p.p.).

Leucosia graniolaris Weber, 1795: 92 [erroneous spelling].

Leucosia perlata de Haan, 1841: 134; Herklots, 1861: 27; de Man, 1881: 124 (p.p.); 1902: 683; Ortmann, 1892: 584; Ihle, 1918: 281; Sakai, 1936: 157, text-fig. 1, 2; Estampador, 1937: 512; Serène, 1968: 47; Takeda, 1973: 90; 1989: 139; Holthuis, 1993: 606, fig. 2; Tan, 1996: 1037, figs 5b-e; Fransen et al., 1997: 88; Davie, 2002: 265.

Leucosia obscura White, 1847: 48 [*nomen nudum*]; Bell, 1855a: 362; 1855b: 285, pl. 30, fig. 3; 1855c: 7; Clark & Presswell, 2001: 158.

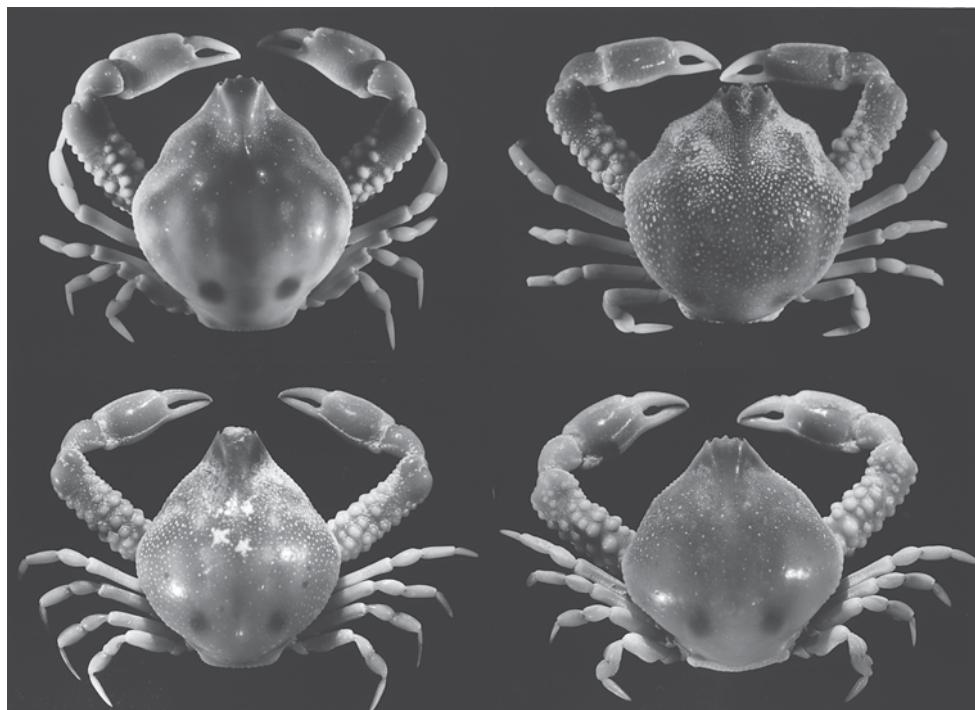


Fig. 1. A, *Leucosia craniolaris* (Linnaeus, 1758), 20.5 mm cl, ZMA; B, *L. moresbiensis* Haswell, 1880, 18.1 mm cl, WAM C25785; C, *L. punctata* Bell, 1855, 17.1 mm cl, ZMK; D, *L. rubripalma* spec. nov., 17.7 mm cl, MNHN.

Leucosia pallida Bell, 1855a: 362; 1855b: 285, pl. 30, fig. 2; 1855c: 7.

Leucosia parvimana Stimpson, 1858: 159; 1907: 151, pl. 18, fig. 1.

Leucosia pallida var. *obscura* Miers, 1880: 316.

Leucosides perlata; Buitendijk, 1939: 230.

Not *Cancer craniolaris*; Herbst, 1783: 90, pl. 2, fig. 17 [= *L. vittata* Stimpson, 1858].

Not *Leucosia craniolaris*; Fabricius, 1798: 350 (p.p.) [= *L. vittata* Stimpson, 1858].

Not *Leucosia perlata*; Tyndale-Biscoe & George, 1962: 84, fig. 7. 3a, b [= *L. moresbiensis* Haswell, 1880].

Material.—Neotype, 1 ♂ (18.6 mm cl), UUZM 238, id. C. Linnaeus as *Cancer craniolaris*, preserved dry. **Malaysia:** 1 ♂ (19.4 mm cl), ZMK, Pulau Tekong, Peninsular Malaya, N.E. of Singapore, 'Galathea' strn 351, intertidal mangrove pond, 28.v.1951. **Indonesia:** Lectotype and paralectotype of *L. perlata* de Haan, 1 ♂ (22.0 mm cl), 1 ♀ (22.6 mm cl), RMNH D42219, Java, 1816-1822, coll. C.G.C. Reynwardt, lectotype selected by Holthuis, 1993: 606; 2 ♂ (22.7, 22.3 mm cl), 1 ♀ ovigerous (23.6 mm cl), RMNH D 804, Bandanaira I., 1881, coll. J. Semmelink, id. J.G. de Man as *L. perlata*; 1 ♀ (20.5 mm cl), RMNH D 806, Sulu Sea, Sangir I., 1867, coll. D.J. Hoedt, id. J.G. de Man as *L. perlata*; 1 ♂ (20.7 mm cl), RMNH D 4212, Maratoea, 14-18.viii.1929, id. Buitendijk as *Leucosides perlata*; 1 ♂ (14.8 mm cl), RMNH D 49810, Ambon, 7-8.xi.1990; 1 ♂ (20.5 mm cl), ZMA, Amboina, 'Siboga' strn 181, 36-54 m, 5-11.ix.1899; 1 ♂ (18.6 mm cl), 2 ♀ (20.1, 19.9 mm cl), 2 juveniles, USNM 273767, 2°03.06'S 130°06.24'E, intertidal, 3.vii.1979; 1 ♂ (18.6 mm cl), USNM 273761, 3°07.54'S 132°30.30'E, intertidal, 4.vii.1979; 2 ♀ (22.6, 22.7 mm cl), ZMK, Lontor, Banda Is., Kei Exp., 7.vi.1922; 1 ♂ (20.9 mm cl), 2 ♀ ovigerous (22.1, 22.0 mm cl), ZMK, Lontor I., Banda Is., Kei Exp., 6.vi.1922; 1 ♂ (21.7 mm cl), 1 ♀ (23.4 mm cl), ZMK, Banda Is., Kei Exp., 6.vii.1922; 1 ♂ (19.5 mm cl), ZMK, Pulo Milu, [no date]. **Philippines:** Lectotype and paralectotype of *L. obscura* Bell, 1 ♂ (21.7 mm cl), 1 ♀ (22.7 mm cl), NHM 1843.6, coll. Cumming, preserved dry; 1 ♂ (17.8 mm cl), 1 ♀ ovigerous (18.9 mm cl), 1 ♀ (19.2 mm cl), USNM 204997, Lubang I., 1934; 1 ♀ ovigerous (20.3 mm cl), USNM, Mindoro I., v.1959, coll. F. Gutierrez; 1 ♀ (20.2 mm cl), USNM 338044, 3°35.46'N 123°09.24'E, 1-2 m depth, 17.v.1978. **Caroline Islands:** 1 ♀ (20.2 mm cl), NSMT cr4659, Palau

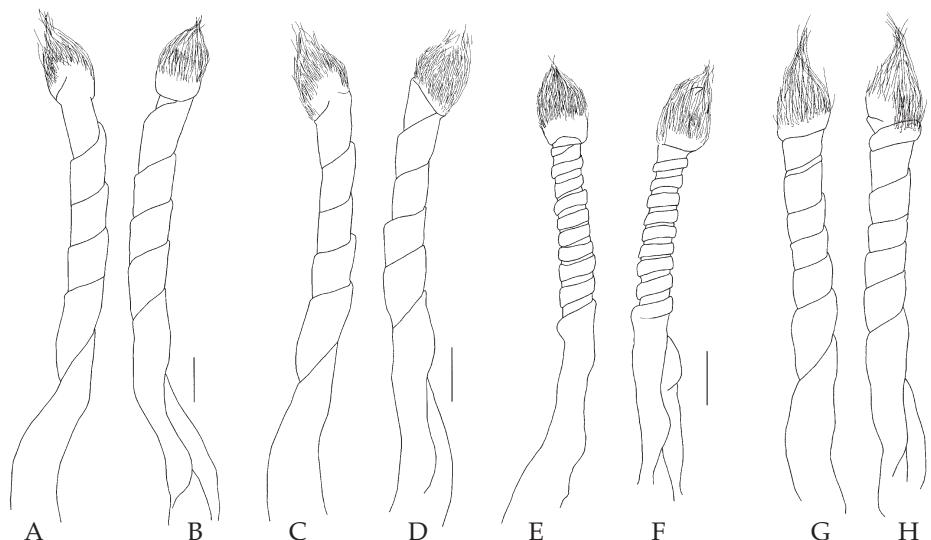


Fig. 2. A, B, *Leucosia craniolaris* (Linnaeus, 1758), ZMK. A, first male pleopod, ventral view; B, first male pleopod, dorsal view; C, D, *L. moresbiensis* Haswell, 1880, QM W20434. C, first male pleopod, ventral view; D, first male pleopod, dorsal view; E, F, *L. punctata* Bell, 1855, ZMK. E, first male pleopod, ventral view; F, first male pleopod, dorsal view; G, H, *L. rubripalma* spec. nov., MNHN. G, first male pleopod, ventral view; H, first male pleopod, dorsal view. Scale 1 mm.

Is., 15-20.i.1973, coll. H. Hayashi, id. M. Takeda. **Indo-Malayan Seas:** 2 ♀♀ (21.5, 22.3 mm cl), NHM 80.6, id. E.J. Miers as *Leucosia pallida* var. *obscura*. **Eastern Seas:** Lectotype and paralectotype of *L. pallida* Bell, 1 ♂ (17.1 mm cl), 1 ♀ (20.5 mm cl), NHM 1847.21, preserved dry.

Description.— Dorsal surface of carapace minutely punctate anteriorly, smooth posteriorly. Frontal margin tridenticulate, median denticle slightly more prominent than lateral denticles. Anterolateral margin, from outer angle of orbit to epibranchial anteriorly defined by overhanging, rounded margin of pterygostomian region, row of 4 perliform granules above cheliped basis, followed by smaller granules. Third thoracic sternite smooth. Fused abdominal segment in male with nasutiform median denticle. Cheliped merus with distal half of dorsal surface smooth; carpus with row of granules on inner margin; lower surface of palm with granulate row on inner margin. Anterior three pereiopodal meri bearing two minutely beaded lines on dorsal margin, posterior line progressively shorter in successive pereiopods; single beaded line on ventral margin; last pereiopodal merus with single beaded line dorsally and ventrally, ventral line carinate. Pereiopodal carpi rounded. Shaft of male 1st pleopod with 5 smooth whorls, last whorl narrower than apical muff.

Colour.— “.. the upper surface of the carapace and of the anterior legs are of dark olive-colour, marbled with a somewhat lighter hue; four whitish spots on the anterior part, the two anterior lying at a greater distance from each other than the posterior; two dark spots behind. Fingers white, except at the base.Tubercles of the upper surface of arms of a yellowish red colour” (de Man, 1881: 124).

Remarks.— Linnaeus' (1758: 626) all too brief description left the identity of *Cancer craniolaris* vague and indeterminate (see above). De Haan (1841: 134) grafted his short description of *Leucosia perlata* to that of *L. rhomboidalis*, where it had probably gone unnoticed by Bell. Miers (1880: 316) thought *L. pallida* Bell “in all structural characteristics is identical with *L. obscura*”, and De Man (1881) synonymized both *L. pallida* and *L. obscura* with *L. perlata* de Haan, to which list of synonymies Ortmann (1892) added *L. parvimana* Stimpson.

L. craniolaris differs from *L. punctata* in possessing a tridenticulate frontal margin, and lacking granules on carapace and 3rd thoracic sternite; it differs from *Leucosia rubripalma* spec. nov. in possessing dorsally rounded pereiopodal carpi, in having the posterior margin of the pterygostomian region round rather than quadrate, and in having the cheliped merus distally smooth; it differs from *L. moresbiensis* in its more delicately punctate carapace, and the number of perliform granules in the thoracic sinus.

Distribution.— Indonesia, Malaysia, Philippines, Ryukyu Is., Caroline Is., Palao Is.

Leucosia moresbiensis Haswell, 1880
(figs. 1B, 2C, D)

Leucosia moresbiensis Haswell, 1880: 49; Serène, 1968: 47.

Leucosia moresbyensis; Nobili, 1899: 251 [erroneous spelling].

Leucosia perlata; Tyndale-Biscoe & George, 1962: 84, fig. 7.3a, b.

Material.— **New Guinea:** 1 ♀ (19.4 mm cl), USNM 411913, 9°31.40'S, 147°15.24'E, 1-4 m depth, 9.vi.1979. **Australia:** 1 ♂ (18.5 mm cl), 1 ♀ ovigerous (18.8 mm cl), NHM 1931.5.15.46-47; 3 ♂♂ (18.1-

19.3 mm cl), NHM 91.6.20.21-23, Roebuck Bay, NW Australia, coll. G.G. Walker; 4 ♂ (17.6-18.2 mm cl), 1 ♀ ovigerous (18.3 mm cl), WAM C480, Broome, 22.x.1914, coll. W.B. Alexander; 1 ♂ (18.1 mm cl), WAM C25785, Dolphin I., 20°28.09'S 116°51.91'E, 17.x.1988, coll. M. Hewitt; 1 ♂ (17.4 mm cl), WAM C25786, East Lewis I., 20°37.50'S 116°39.18'E, 5.ix.1999, coll. M. Hewitt; 1 ♂ (19.8 mm cl), QM W20434, MacLeay I., Kimberley coast, 15°57.5'S 123°42.1'E, 21.xi.1994, coll. J. Short.

Description.— Dorsal surface of carapace coarsely punctate. Frontal margin tridenticulate, median denticle slightly more prominent than lateral denticles. Anterolateral margin, prominently sinuous. Epibranchial angle of carapace rounded, sloping. Thoracic sinus anteriorly defined by overhanging, rounded margin of pterygostomian region, 2-3 perliform granules above cheliped basis. Third thoracic sternite smooth. Fused abdominal segment in male with nasutiform median denticle. Cheliped merus with distal half of dorsal surface smooth; carpus with row of granules on inner margin; lower surface of palm with granulate row on inner margin. Pereiopodal meri with obsolescent beaded line on dorsal margin; prominent beaded line on ventral margin. Pereiopodal carpi rounded. Shaft of male 1st pleopod with 5 smooth whorls, last whorl as wide as apical muff.

Colour.— “deep brown above, lighter posteriorly” (Haswell, 1880: 49).

Remarks.— Haswell (1880: 49) described *Leucosia moresbiensis* as possessing “Thoracic sinus.... bordered below by a row of three large compressed tubercles”. This feature, and the crab’s coarsely punctate carapace distinguish the species from its close congener, *L. craniolaris*. Miers (1881: 316) considered the number of tubercles on the lower margin of the thoracic sinus “would probably not suffice to distinguish *L. obscura* [= *L. craniolaris*] from *L. moresbiensis*”, but already Nobili (1899: 251) recognized that *L. moresbiensis* is not “una varietà locale” of *L. pallida* [= *L. craniolaris*].

Distribution.— New Guinea, Australia.

Leucosia punctata Bell, 1855
(figs. 1C, 2E, F)

Leucosia punctata Bell, 1855a: 362; 1855b: 286, pl. 30, fig. 5; 1855c: 8; Ihle, 1918: 277; Estampador, 1937: 511; Serène, 1968: 47.

Material.— **Indian Ocean?**: Holotype, 1 ♂ (20.5 mm cl), NHM. **Philippines**: 1 ♀ (14.7 mm cl), USNM 234264, Uala Reef, Quezon Province, 3-9 m depth, 3-5.v.1959, coll. J.E. Norton; 1 ♀ (16.3 mm cl), USNM 234264, Zambales Prov., Nasasa Bay, 9-33 m depth, 30.i-8.ii.1960, colls F.G. Dayrit & J.E. Norton. **Indonesia**: 1 ♂ (20.1 mm cl), ZMA, ‘Siboga’ stn 313, Lesser Sunda Is., Saleh Bay, 36 m; 1 ♂ (17.1 mm cl), 1 ♀ (16.6 mm cl), 2 juveniles, ZMK, Java Sea, Kei Is. Exp., stn 19, Toeal, 20 m, 12.iv.1922, coll. Th. Mortensen; 1 ♂ (15.8 mm cl), WAM C.24987, Sulu Archipelago, Sibutu, 4°31'N, 119°22'E, 25-26.ii.1964, coll. B.R. Wilson. **Australia**: 1 ♀ (16.6 mm cl), WAM C25787, Dampier Archipelago, Dolphin I., 20°30.25'S 116°49.33'E, intertidal, 21.x.1988, coll. M. Hewitt.

Description.— Dorsal surface of carapace densely punctate. Frontal margin medially emarginate. Anterolateral margin oblique, minutely beaded. Epibranchial angle of carapace sloping, distally granulate. Posterolateral margin beaded, terminating posteriorly in granulate cluster. Thoracic sinus anteriorly defined by overhanging, granulate, rounded margin of pterygostomian region, its floor minutely granulate, row of 4-5 perliform granules above cheliped basis, followed by smaller granules. Pterygosto-

mian plate granulate along external margin. Third thoracic sternite bearing transverse granulate band. Fused abdominal segment in male with minute triangular denticle. Upper surface of cheliped merus granulate throughout; carpus with row of granules on inner and upper margins; granulate lower surface of palm with granulate lines on inner and outer margins, extending to proximal part of pollex. Anterior three pereiopodal meri bearing two minutely beaded lines on dorsal margin, posterior line progressively shorter in successive pereiopods; two beaded lines on ventral margin; last pereiopodal merus with single beaded line dorsally and ventrally, ventral line carinate. Pereiopodal carpi dorsally carinate. Shaft of male 1st pleopod with 9-10 thick-lipped corkscrew whorls.

Colour.— “Greyish-brown, with two darker spots on the branchial regions”(Bell, 1855b: 287).

Remarks.— *Leucosia punctata* differs from its congeners in possessing a medially emarginated frontal margin, clusters of granules on epibranchial and posterolateral regions of the carapace, and a transverse band of granules on its 3rd thoracic sternite.

Distribution.— Philippines, Indonesia, Australia.

Leucosia rubripalma spec. nov.
(figs. 1D, 2G, H)

Leucosia anatum; Ng et al., 2001: 8, fig. 1h.

Material.— **New Caledonia:** Holotype, 1 ♂ (17.8 mm cl), MNHN B18433, Noumea, 6.viii.1984; Paratype, 1 ♂ (18.4 mm cl), MNHN B21057, stn 16, Noumea, 22°21'S 166°38'E, 30 m depth, v.1984; 1 ♀ (17.9 mm cl), MNHN B21115, stn 179, St Vincent Bay, 22°01'S 166°04'E, 12 m depth, ix.1984; 1 ♂ (17.7 mm cl), MNHN, stn DW950, NW lagoon, 20°31.3'S 164°10.6'E, 12-13 m depth, 28.iv.1988, coll. B. Richer de Forges. **Indonesia:** 1 ♂ (20.0 mm cl), MNB 4732, Amboina.

Description.— Dorsal surface of carapace delicately punctate anteriorly. Frontal margin tridentate, denticles subequal. Anterolateral margin slightly sinuous. Epibranchial angle of carapace sloping, margin coarsely milled. Posterolateral margin smooth. Lateral lobes of posterior margin expanded, lappet-like. Thoracic sinus anteriorly defined by overhanging, granulate, rectangular margin of pterygostomian region, its floor distinctly granulate throughout, row of 4-5 coalescent granules above cheliped basis, followed by smaller granules. Third thoracic sternite smooth. Fused abdominal segment in male with minute triangular denticle. Upper surface of cheliped merus granulate throughout. Carpus with row of granules on inner and upper margins. Lower surface of palm with granulate lines on inner and outer margins, extending to proximal part of pollex. Anterior three pereiopodal meri bearing two minutely beaded lines on dorsal margin, posterior line progressively shorter in successive pereiopods; two beaded lines on ventral margin; last pereiopodal merus with single beaded line dorsally, two beaded lines ventrally, posterior line carinate. Pereiopodal carpi dorsally carinate. Shaft of male 1st pleopod with 7 whorls, the uppermost whorl cornuted, setose.

Colour (in alcohol).— Carapace ochre-orange, darker anteriorly, two orange spots posteriorly near lateral corners of posterior margin, bright-orange patch on inner surface of palm. Epimeral ledge white. Pereiopods white, banded with orange.

Remarks.—*Leucosia rubripalma* spec. nov. differs from *L. punctata* in possessing a tridenticulate frontal margin, and lacking granules on carapace and 3rd thoracic sternite; it differs from *L. moresbiensis* and *L. craniolaris* in possessing laterally expanded posterior margin of carapace, dorsally carinate pereiopodal carpi, rectangular posterior margin of pterygostomian region, and cheliped merus with upper surface granulate throughout.

Distribution.—Singapore, Indonesia, New Caledonia.

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