

MATERIAL EXAMINED

Cape Maria van Diemen: [Cop. 3] spp.
 Whangaroa Harbour: [46] 1 sp.
 Cape Brett: [Cop. 5] spp.
 Piha: [Z2283] about 8 spp.
 Russell: [E981] 10 spp.
 Dargaville: [E952] 9 juvs (4-7 mm), 4 ♂♂ (8 mm).
 Auckland: [E949] 15 juvs (2-7 mm), 4 ♀♀ (8-9 mm), 6 ♂♂ (8-11 mm); [E953] 3 juvs (3-7 mm), 3 ♀♀ (9-10 mm), 1 ♂ (10 mm); [E957] 1 juv. (6 mm); [Z2308] 1 sp; [Cop. 12] spp.
 Mt. Maunganui: [E959] 11 juvs (3-7 mm), 1 ♀ (9 mm), 5 ♂♂ (8-10 mm).
 Wellington: [E966] 6 spp; [E967] 2 spp; [23] 13 spp; [27] 4 spp; [Z2298] 4 spp.
 Brothers Is: [Z2313] 7 spp.
 Kaikoura: [104] 608 juvs (2-6 mm), 281 ♀♀ (7-11 mm), 175 ♂♂ (7-13 mm); [E969] 12 spp; [E971] 12 spp; [E973] 50-60 spp; [90] about 20 spp; [93] 6 spp; [95] 2 spp; [96] 3 spp; [97] 1 sp; [112] 1 sp.
 Oamaru: [131] 6 spp.
 Dunedin: [E974] 18 spp.
 Stewart I: [76-83] 85 juvs (3-10 mm), 5 ♀♀ (8-9 mm), 9 ♂♂ (12-13 mm); [37] 1 sp.
 Chatham I: [CIE 9, 11, 26, 48] 22 juvs (2-9 mm), 5 ♀♀ (7-10 mm), 2 ♂♂ (11 mm).
 Snares Is: [63, 65, 66, 68, 69, 71, 72, 74] 60 juvs (2-7 mm), 8 ♀♀ (6-7 mm), 3 ♂♂ (7-10 mm).
 Auckland Is: [48, 50, 51, 52, 53, 55, 56, 59] 15 juvs (3-9 mm), 23 ♀♀ (9-11 mm), 9 ♂♂ (10-16 mm); [2] 1 sp; [11] 6 spp; [4] spp.
 OTHER RECORDS: Kermadec Is (coll. Capt. Bollons), Spirits Bay, Tauranga, Waitangi (coll. W. R. B. Oliver), Lyttelton (coll. J. S. Slyfield, 1925), Chatham Is (coll. H. B. Kirk), Stewart I. (coll. W. R. B. Oliver, H. B. Kirk), Antipodes I. (coll. L. Cockayne, 1903).

HABITAT: Under stones, among and under algal hold-fasts (Jansen 1971).

DEPTH RANGE: Intertidal.

REMARKS: Morton & Miller (1968: 214) describe the species as the common isopod in the Auckland area on clean, exposed coast where "*Gigartina alveata* will mingle with the green *Ulva* and *Letterstedtia* as high as mid tide level . . . its normally orange body becoming blue-green to match the surroundings". They also speak of it as a common inhabitant of small red algae, and as being orange-brown. Morton & Miller's figure (71.1) appears to be *D. huttoni*.

Specimens from Lyall Bay [22] carried the commensal isopod *Iais californica*. Hicks (1971) records specimens of *D. huttoni* up to 5 mm long characterising mid-littoral samples of coralline algae at Island Bay.

Jansen (1971) found only juveniles in small red algae at higher intertidal levels, and mixed populations of adults and juveniles among brown algae at lower levels.

***Dynamenella insulsa* n.sp. (Fig. 25)**

DIAGNOSIS

Dynamenella with deep apical notch in pleotelson, constricted posteriorly in females and immature males, closed with a large, broad, median tooth in mature males. Sexes otherwise similar. Pleotelson dorsal surface smooth. Body segments with marginal lateral setae.

TYPE MATERIAL

Holotype: Canterbury Museum Type No. AQ3409 [104, ♂, 5 mm].

Paratypes: Canterbury Museum Type No. AQ3434 [104, 6 juvs, 1.5-3.5 mm; 1 ♀, 3.5 mm; 6 ♂♂, 3.8-5 mm].

TYPE LOCALITY: Kaikoura.

MATERIAL EXAMINED

Kaikoura: [104] 6 juvs (1.5-3.5 mm), 1 ♀ (3.5 mm), 7 ♂♂ (3.8-5 mm); [103] 1 juv. (4 mm), 1 ♂ (5 mm); [E971] 1 juv. (3 mm).

OTHER RECORDS: None.

HABITAT: Among algae, under stones.

DEPTH RANGE: Intertidal.

***Dynamenella mortenseni* n.sp. (Fig. 26)**

DIAGNOSIS

Dynamenella with deep apical notch in pleotelson, closed posteriorly in males and females, and with a broad, obtuse, median tooth in mature males. Sexes otherwise similar. Entire body dorsally tuberculate, more coarsely posteriorly.

TYPE MATERIAL

Holotype: NZOI Type No. 148 [Cop. 5, ♂, 9 mm].

Paratypes: NZOI Type No. P205 [Cop. 5, 3 ♂♂, 6-7 mm].

TYPE LOCALITY: Cape Brett.

MATERIAL EXAMINED

Cape Brett: [Cop. 5] 1 ♂ (9 mm), 3 ♀♀ (6-7 mm).

HABITAT: Among algae.

DEPTH RANGE: Intertidal.

***Dynamenella* sp. (Fig. 27)**

Juveniles collected from Bethell's Beach, Auckland west coast, and Ocean Beach (Whangarei) appear not to fit any of the established New Zealand species, and without mature males, at least, cannot be properly identified. Figures are given so that matching adults may be looked for.

MATERIAL EXAMINED

Ocean Beach: [E953] 1 sp.

Bethell's Beach: [E949] 3 spp.

***Dynamenoides* n.gen.**

TYPE SPECIES: *Dynamenoides vulcanata* n.sp.

DIAGNOSIS

Eubranchiata Sphaeromatidae with pleopod 3 outer ramus unsegmented. Antenna I peduncle, first segment not expanded in large plate. Pereonite 7 in mature males widened, with rear margin medially excavate, lateral ends produced posteriorly in acute process in males. Pleopod 2 inner ramus has reduced appendix masculina, not longer than inner ramus itself. Pleotelson has transverse foramen connected with apex by a narrow slit; in females and immature males the foramen is circular, and the slit may be narrow or closed. Dorsal processes absent in females and immature males.

REMARKS: *Dynamenoides* is separated from *Dynamenella* by the reduced appendix masculina in mature males and by the sexual differentiation in *Dynamenoides*. It is distinguished from *Dynamene* by the appendix masculina (lacking in *Dynamene*), and by the pereonite 7 processes in males - *Dynamene* has processes on pereonite 6 (Holdich 1968b: 401-7).

No gravid females of either species described here were seen, so it is not yet possible to diagnose mouthparts or broodplates.

KEY TO NEW ZEALAND AND SUBANTARCTIC SPECIES OF
DYNAMENOIDES

Uropod outer rami in mature males about twice length
of inner; epistome not produced anteriorly, not pro-
truding between bases of antennae I VULCANATA

Uropod rami in mature males subequal; epistome pro-
duced anteriorly, protruding between bases of antennae
I DECIMA

Dynamenoides decima n.sp. (Fig. 28)

DIAGNOSIS

Dynamenoides with epistome produced anteriorly, pro-
truding between bases of antennae I. Coxal plates broad,
contiguous. Uropod rami subequal in mature males.

TYPE MATERIAL

Holotype: NZOI Type No. 149 [E983, ♂, 6 mm].

Paratypes: NZOI Type No. P206 [E983, 36 juvs, 3-6 mm; 3
immature ♂♂, 5.5 mm; 2 mature ♂♂, 5-6 mm].

TYPE LOCALITY: Castlepoint.

MATERIAL EXAMINED

Bay of Islands: [E981] about 20 spp; [Cop. 6] spp.

Dargaville: [E952] 1 sp.

Auckland: [E956] 1 juv. (3 mm), 2 immature ♂♂ (5.5-6
mm); [E975, 978, 979] 27 juvs (1.5-5.5 mm).

Mt Maunganui: [E959] 2 spp.

Napier: [Z2297] 4 spp.

Castlepoint: [E983] 36 juvs (3-6 mm), 3 immature ♂♂
(5.5 mm), 3 mature ♂♂ (5-6 mm).

Wellington: [E985] about 15 spp; [E966] 4 spp; [E967] 2 spp;
[Z2298] 1 sp.

Kaikoura: [E971] 1 sp.

OTHER RECORDS: None.

HABITAT: Among algae, under stones.

DEPTH RANGE: Intertidal.

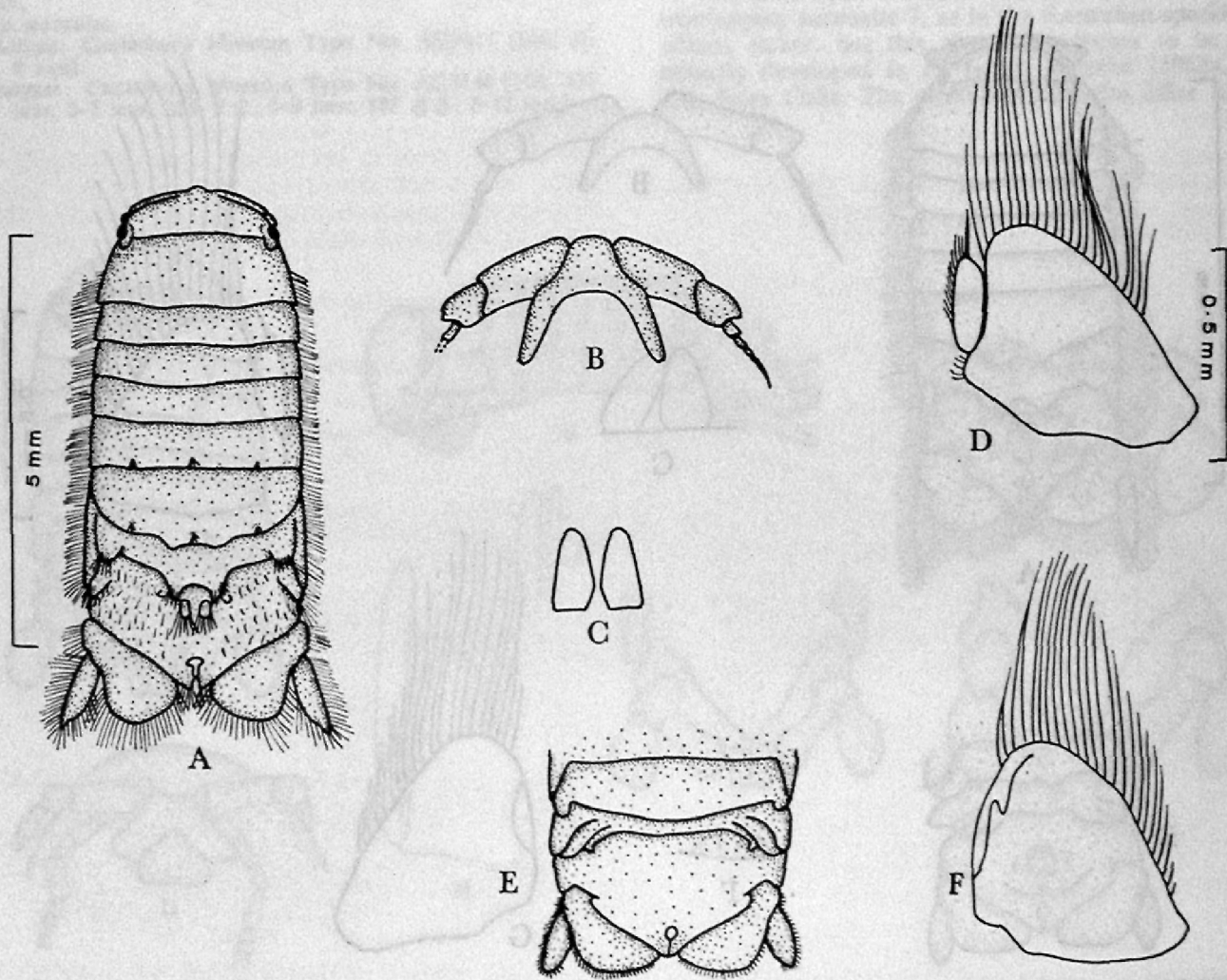


FIG. 28. *Dynamenoides decima* n.sp., mature ♂ except E, F (immature ♂): A, whole animal; B, epistome and antenna I; C, penes; D, pleopod 2, inner ramus; E, pleon; F, pleopod 2, inner ramus.

Dynamenoides vulcanata n.sp. (Fig. 29)

DIAGNOSIS

Dynamenoides with epistome broadly rounded, not produced anteriorly, not protruding between bases of antennae I. Coxal plates narrow, but widely separated. Uropod outer ramus in mature males about twice length of inner.

TYPE MATERIAL

Holotype: Canterbury Museum Type No. AQ3412 [104, ♂, 6 mm].

Paratypes: Canterbury Museum Type No. AQ3437 [104, 29 juvs, 3-6 mm; 4 immature ♂♂, 5.0-5.5 mm; 2 mature ♂♂, 6.0-6.5 mm].

TYPE LOCALITY: Kaikoura.

MATERIAL EXAMINED

Auckland: [E956] 2 juvs (4.5 mm), 2 ♂♂ (5.5-6 mm); [E977, 978, 979] 19 juvs (2-3 mm); [138] 1 immature ♂ (5 mm).

Gisborne: [E982] 6 juvs (2-3 mm).

Castlepoint: [E983] 2 juvs (3-5 mm).

Wellington: [27] 1 juv. (5.5 mm).

Kaikoura: [104] 29 juvs (3-6 mm), 4 immature ♂♂ (5-5.5 mm), 8 mature ♂♂ (6-6.5 mm); [E969, E971] 31 juvs (2-4.5 mm), 2 ♀♀ (5.5-6 mm), 1 immature ♂ (5 mm).

OTHER RECORDS: None.

HABITAT: Among algae, under stones.

DEPTH RANGE: Intertidal.

Dynamenopsis Baker, 1908

Dynamenopsis Baker, 1908: 152-3 (implicit in *Dynamenopsis obtusa*). Menzies, 1962a: 142.

TYPE SPECIES: *Dynamenopsis obtusa* Baker, 1908.

Eubranchiate Sphaeromatidae with pleopod 3 outer ramus 2-segmented. Pleopod 2 in mature males has well developed appendix masculina. Pereonite 6 coxal plates produced posteriorly, overlapping pereonite 7. Pleotelson strongly tuberculate, sides of apex folded down and around forming a nearly closed tube. Males and females similar. Female mouthparts not metamorphosed.

REMARKS: Menzies & Glynn (1968) consider that *Dynamenopsis* is a synonym of *Dynamenella* because of their discovery that the type of *Dynamenella* has a 2-segmented pleopod 3. However, we consider that the differences between *Dynamenopsis* and *Dynamenella* in pleotelson shape and development of pereonite 6 coxal plates are sufficiently distinctive to warrant the continued recognition of Baker's *Dynamenopsis obtusa* and our species as belonging to a valid genus. It is perhaps relevant to point out that Baker did not define the genus on the basis of pleopod 3, but merely described the species in detail and left the generic diagnosis to be

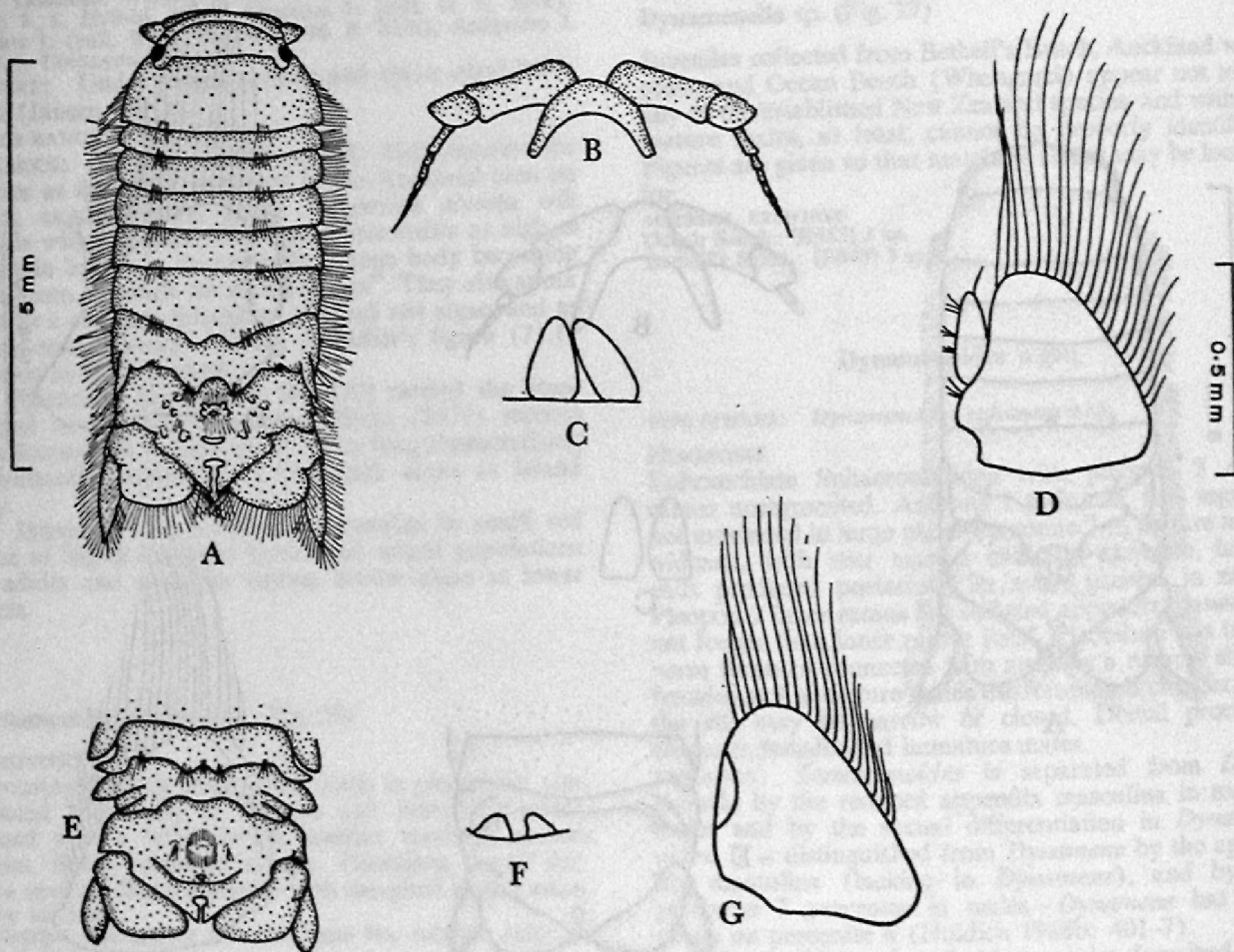


FIG. 29. *Dynamenoides vulcanata* n.sp., mature ♂ except E-G (immature ♂): A, whole animal; B, epistome and antenna I; C, penes; D, pleopod 2, inner ramus; E, pleon; F, penes; G, pleopod 2, inner ramus.

inferred from the specific description, and that *Dynamenopsis diana* (Menzies, 1962b), which Menzies & Glynn (1968) transfer to *Dynamenella* is, by our standards, *Dynamenella* and not *Dynamenopsis*.

We were unable to find any trace of pleopod 3 segmentation in New Zealand species of *Dynamenella*; it may be that they warrant further distinction from *Dynamenella perforata*, the type of *Dynamenella*, but we would not place this much emphasis on pleopod 3 alone, and would want other criteria to confirm any such separation.

***Dynamenopsis varicolor* Hurley & Jansen, 1971 (Fig. 30)**

Dynamenopsis varicolor Hurley & Jansen, 1971: 473. Jansen, 1971: 173.
Dynamenopsis sp. Hicks, 1971: 52, 56.

DIAGNOSIS

Dynamenopsis with a pair of prominent conical tubercles on pleotelson surrounded by a ring of smaller tubercles, a further prominent tubercle above the apical foramen. Uropod outer ramus broadly rounded and flat, inner ramus subrectangular, has concave outer margin, acute apex.

TYPE MATERIAL

Holotype: Canterbury Museum Type No. AQ3411 [104, ♂, 8 mm].
Paratypes: Canterbury Museum Type No. AQ3436 [104, 402 juvs, 2-7 mm; 213 ♀♀, 5-9 mm; 185 ♂♂, 5-12 mm].

TYPE LOCALITY: Kaikoura.

MATERIAL EXAMINED

North Cape: [Cop. 4] spp.

Cape Brett: [Cop. 5] spp.

Whangarei: [E953] 1 ♀ (6 mm).

Auckland: [E957] 1 juv. (3.5 mm); [E975, 977, 979] 7 juvs (2.6 mm); [Gal. 644] 1 ♂.

Gisborne: [E982] 4 juvs (3-4 mm).

Castlepoint: [E983] 2 juvs (3 mm), 1 ♀ (7 mm); [Z2298, Z2299] 4 juvs (2 mm), 2 ♀♀ (6-7 mm), 1 ♂ (7 mm).

Wellington: [E967] 3 juvs (3-4 mm); [E986] 1 sp; [Z2304] 1 sp; [23] 3 ♀♀ (6.5 mm).

Kaikoura: [104] 402 juvs (2-7 mm), 213 ♀♀ (5-9 mm), 186 ♂♂ (5-10 mm); [E969, 971] 9 juvs (2-5 mm), 2 ♀♀ (5-8 mm), 1 ♂ (6 mm); [110] 30+ spp; [94] 6 spp.

Chatham Is: [E105] 1 ♀ (8 mm); [CIE 11, 12, 16, 47] 1 juv. (5 mm), 3 ♀♀ (6-8 mm), 2 ♂♂ (6-7 mm); [CIE 22] 2 spp.

OTHER RECORDS: Tom Bowling Bay (coll. *Hinemoa*); Tauranga; Cook Strait, The Sisters; Lyttelton, Taylor's Mistake; Otago, Shag Point; Chatham I. Red Bluff (coll. W. R. B. Oliver) (material in Chilton Coll., labelled with MS. names "*Cilicaea rubra*" or "*Sphaeroma rubra*").

HABITAT: Under stones, among algae.

DEPTH RANGE: Intertidal.

REMARKS: *Dynamenopsis varicolor* is the only species of *Dynamenopsis* so far found in the New Zealand region. Surprisingly, because it is a very common littoral species, it has not previously been recorded.

Dynamenopsis varicolor has coxal plate 6 strongly overlapping pereonite 7, as in the Australian species *D. obtusa* Baker, but this character appears to be less strongly developed in *D. bakeri* Menzies (1962a, fig. 48), from Chile. The pleotelson tubercles differ in the

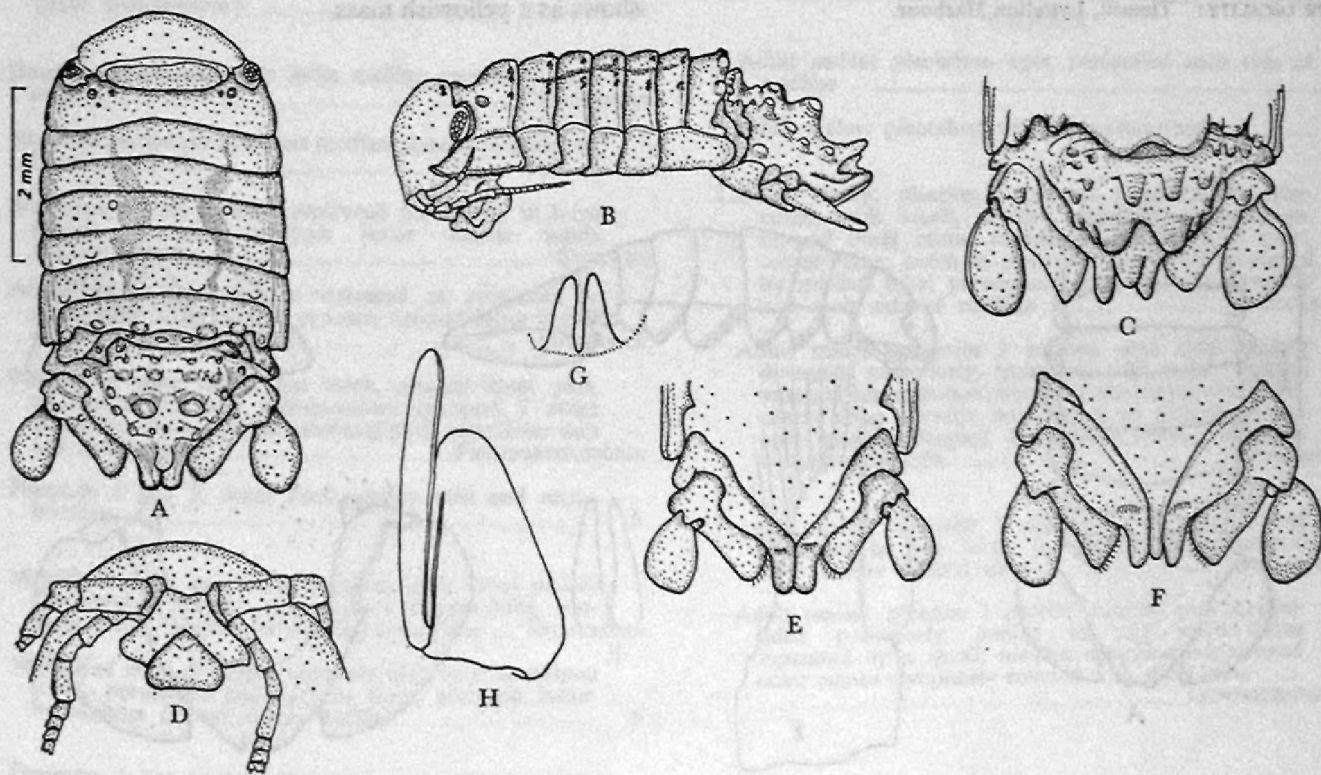


FIG. 30. *Dynamenopsis varicolor* Hurley & Jansen, mature ♂ except F (♀): A, whole animal; B, side view; C, pleotelson, dorsal view; D, ventral view of head, showing epistome and peduncles of antenna I; E, F, pleotelson, ventral view; G, penes; H, pleopod 2, inner ramus (without setae).

three species: they are most strongly developed in *varicolor*, least so in *obtusata*, and both *obtusata* and *bakeri* lack the large, paired tubercles of *varicolor*. Also, the uropods of *bakeri* are characteristically serrated.

Dynamenopsis varicolor is also distinguished by its strikingly variegated colour pattern in life, predominantly rosy pink or coral red, with specks of iridescent greenish-blue and black.

Scutuloidea Chilton, 1883

Scutuloidea Chilton, 1883a: 69–70. Hansen, 1905: 107, 126.
TYPE SPECIES: *Scutuloidea maculata* Chilton, 1883.

DIAGNOSIS

Eubranchiate Sphaeromatidae with pleopod 3 outer ramus of 2 segments. Mature males with well developed appendix masculina on pleopod 2 inner ramus. Female mouthparts not metamorphosed. Broodplates overlapping in midline. Uropod a large, single plate. Sexes similar.

Scutuloidea maculata Chilton, 1883 (Fig. 31)

Scutuloidea maculata Chilton, 1883a: 70–1, pl. 1 fig. 1. Nierstrasz, 1931: 214. Hurley, 1961: 271. Morton & Miller, 1968: 217, fig. 71.7. Hicks, 1971: 56. Jansen, 1971: 268, 273–4.

DIAGNOSIS

Scutuloidea with smooth body surface. Pleotelson large, triangular, with wide, shallow apical notch.
TYPE LOCALITY: Timaru, Lyttelton Harbour.

MATERIAL EXAMINED

Cape Maria van Diemen: [145] 50 spp. (2–5 mm); [Cop. 3] spp.
Whangarei: [E953] 20 juvs (2–3.5 mm), 20 ♀♀ (3–4 mm), 20 ♂♂ (3.5–5.5 mm).
Piha: [Z2283] about 20 spp.
Cuvier Is: [137] 2 spp.
Auckland: [E975] 6 juvs (1.5–2 mm); [Z2281] 1 sp.
Coromandel: [Z2308] about 14 spp.
Tauranga: [147] 5 spp. (5 mm); [148] many spp.
Mt. Maunganui: [E959] 1 juv. (3.5 mm), 2 ♀♀ (3.5–4 mm), 2 ♂♂ (3.5–5 mm).
Napier: [Z2297] 4 spp.
Castlepoint: [E983] 6 spp.
Wellington: [Z2304] 2 spp.
Cook Strait: [C395] 1 sp.; [Z2313] 20–30 juvs.
Kaikoura: [104] 733 juvs (1.5–4.5 mm), 360 ♀♀ (3–5 mm), 332 ♂♂ (4–7 mm); [E969, 971] 141 juvs (1.5–4 mm), 8 ♀♀ (3–4 mm), 3 ♂♂ (5–5.5 mm); [100] 1 sp.; [91] about 18 spp.
Lyttelton: [143] 104 spp. (1.5–4 mm); [146] 2 spp. (4–6 mm); [149] 8 spp. (3–5 mm).
Sumner: [144] 28 spp. (2–5 mm).
Otago: [E973, 974] 41 juvs (1.5–3.5 mm), 6 ♀♀ (3–3.5 mm), 6 ♂♂ (3.5–5 mm).
Stewart I: [77, 80, 82] 5 juvs (2.5–3 mm), 12 ♀♀ (2.5–4 mm), 21 ♂♂ (3.5–5 mm).
Snares Is: [68, 69, 70, 71, 74] 21 juvs (2.5–5 mm), 8 ♀♀ (3–4 mm), 11 ♂♂ (4.5–6 mm).
Chatham Is: [CIE 12] 1 juv. (4 mm), 1 ♀ (4 mm), 2 ♂♂ (5–6 mm).

OTHER RECORDS: Timaru (Chilton 1883: 70).

HABITAT: Algal fronds ("small red algae"—Morton & Miller 1968: "brown algae"—Jansen 1971).

DEPTH RANGE: Intertidal to 11 m.

REMARKS: The material from Lyttelton [143] included several males carrying females with their 3rd–5th legs. The females tend to be thicker in the body than the males, which are almost flat. The specimens have a circular, transparent area above the pleopod box which shows as a yellowish mass.

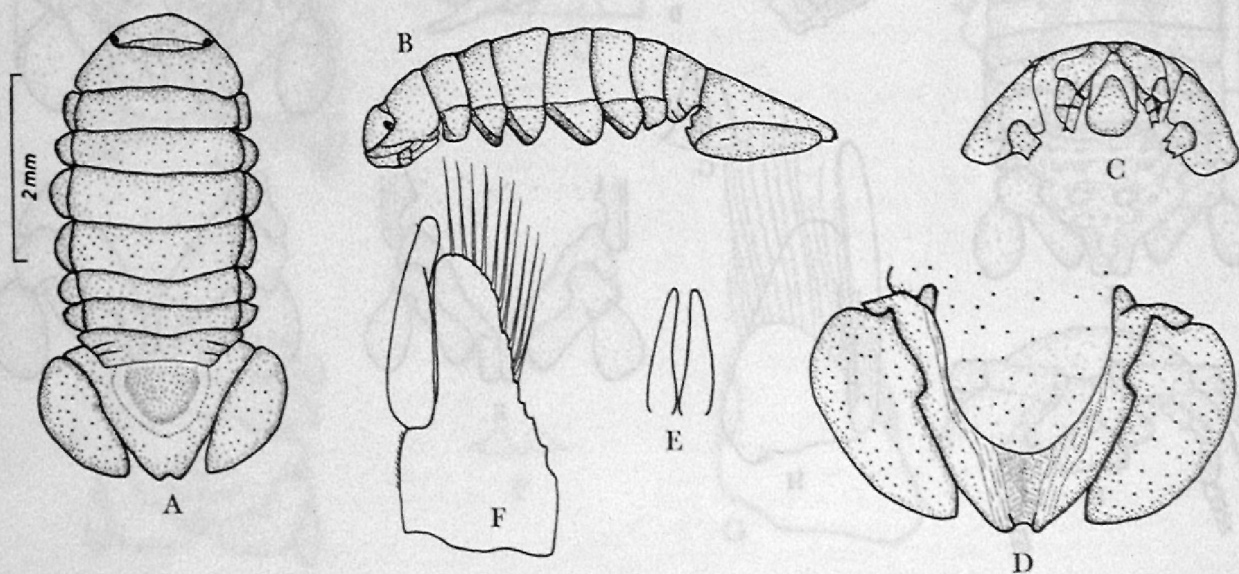


FIG. 31. *Scutuloidea maculata* Chilton, mature ♂: A, whole animal; B, side view; C, head, ventral view showing epistome and peduncles of antenna I; D, pleotelson, ventral view; E, penes; F, pleopod 2, inner ramus.

SUBFAMILY HEMIBRANCHIATINAE

Group SPHAEROMINAE HEMIBRANCHIATAE Hansen, 1905: 100-5.

DIAGNOSIS

Pleopods 4 and 5, inner rami thick and fleshy with deep, essentially transverse, folds; outer rami membranaceous* and rather pellucid, of two segments, both rami with plumose marginal setae; pleopod 5, outer ramus apical squamiferous protuberance very high; pleopod 3, both rami closely set with long, plumose setae, at least on distal margin; pleopod 1, inner ramus at least rather broad, scarcely ever half as long again as broad. (After Hansen 1905)

REMARKS: Hansen (1905: 102) also adds these further comments (in précis): the proximal segments of the antennae fit into oblique excavations in front of the head—they never protrude with free expansions; the outer ramus of the uropods is always present, but may sometimes be exceedingly small; the brood develops in internal pouches; the body is never strongly depressed, and the animal has the faculty of rolling up excellently developed; the lateral margins of the pereon are not continuous.

KEY TO NEW ZEALAND AND SUBANTARCTIC GENERA OF SUBFAMILY HEMIBRANCHIATINAE

1. Pleotelson apex notched in both males and females (tribe Cymodocini) 2
- Pleotelson apex without notch in males or females (tribe Sphaeromini) 4
2. Notch in pleotelson apex lacks median process in both sexes CYMODOPSIS
- Notch in pleotelson apex has median process in males or females or both 3
3. Adult males, first pleonite produced posteriorly in large median process; uropod inner ramus much reduced CILICAEA
- Adult males, first pleonite unarmed or produced in moderately large median process; uropod inner ramus well developed CYMODOCE
4. Pleopod 4 outer ramus has thick, opaque inner part, remainder thin and membranous; pleopod 5 outer ramus has thick, opaque proximal part, remainder thin and membranous PSEUDOSPHAEROMA
- Pleopods 4 and 5, outer rami wholly thin and membranous 5
5. Maxilliped palp, last three segments have lobes poorly developed or absent; pereopods 1-3 have long, plumose setae; broodplates overlap in midline SPHAEROMA
- Maxilliped palp, last three segments have well developed lobes; pereopods are without long, plumose setae; broodplates do not reach midline 6
6. Pereonite 7 has backwardly directed median spine in males ISOCLADUS
- Pereonite 7 lacks median spine in both sexes XOSPHAEROMA

Tribe Cymodocini Hansen, 1905

Section Cymodocini Hansen, 1905: 104.

DIAGNOSIS

Pleotelson in both sexes notched, notch semicircular or bilobed often divided by a median process. Mouthparts strongly metamorphosed in gravid females (mandibles lack dark, strongly chitinised apices, other mouthparts blunted and non-setose). Maxilliped palp has long lobes on last three segments. Pleopod 3, outer ramus 2-segmented. Broodplates overlapping in midline.

Cilicaea Leach, 1818

Cilicaea Leach, 1818: 342. Hansen, 1905: 104, 122-3.

TYPE SPECIES: *Cilicaea latreillei* Leach, 1818

DIAGNOSIS

Hemibranchiate Sphaeromatidae with pleotelson apex notched in males and females, the notch usually divided by a median lobe. Epistome without free process in front. Uropod outer ramus well developed, inner ramus vestigial in mature males, subequal in females and immature males. Pleonite 1 in adult males with large process which is reduced in immature males, absent in females. Pleopod 2 inner ramus has well developed appendix masculina in mature males.

REMARKS: The inclusion of *Cilicaea latreillei* in the New Zealand fauna (Hurley 1961: 270) was based on a misreading by Nierstrasz (1931: 205) of a remark by Miers (1884: 329). It should be deleted.

KEY TO NEW ZEALAND AND SUBANTARCTIC SPECIES OF CILICAEA

1. Adult males: pleotelson apex perforated each side of midline 2
- Adult males: pleotelson without perforations 3
2. Adult males: pleonite 1 process parallel-sided, truncated, with small, median, terminal emargination; uropod outer ramus completely covered with short, coarse setae; notch in pleotelson apex fully occupied by median lobe; pereonites with setal tufts laterally and each side of midline CANICULATA
- Adult males: pleonite 1 process with sides slightly divergent posteriorly, truncated, with small, median, terminal emargination; uropod outer ramus with short, coarse setae dorsally only; notch in pleotelson apex only partly occupied by median lobe; pereonites without setal tufts DOLOROSA
3. Adult males: pleonite 1 process with posterior end expanded in two large, leaf-shaped lobes; uropod outer ramus without setae TASMANENSIS
- Adult males: pleonite 1 process narrow and parallel-sided posteriorly, ending in two small lobes separated by a small, median emargination; uropod outer ramus completely covered with short setae ANGUSTISPINATA

*In *Pseudosphaeroma*, pleopods 4 and 5 have the inner part of the outer ramus thick and opaque but the rest of the ramus thin and membranaceous.