cl 27.6, cw 30.0, mcw 35.2 (BM 1928.12.1.206). - $29^{\circ} 07.24^{\prime} \mathrm{S}, 15^{\circ} 26.06^{\prime} \mathrm{E}, 183 \mathrm{~m}, 31$ July $1986: 4$ ठ, cl 25.6-30.5, cw 27.9-33.2, mcw 31.6-39.3; 1 ¢, cl 26.0, cw 28.2, mcw 32.8 (USNM 237561).

Type locality. - South Africa, Cape Province (de HaAN, 1837).
DESCRIPTION. - Carapace nearly as long as wide, granulate, ridges coarsely tuberculate, mesogastric tubercles largest, most prominent. Front ogival. Inner and outer orbital angles prominent. Supraorbital margin bifissured.


Fig. 4. - Dorsal view : a, Mursia cristiata H. Milne Edwards, 1837, of cl 27.4 mm , South Africa, Simon's Bay, 9-33 m (BM 1884.31). - b, Mursia curtispina Miers, 1886, ㅇ, holotype, cl 29.5 mm , Fiji Ids, 576 m (BM 1884.31). c, Mursia hawaiiensis Rathbun, 1893, of cl 22.9 mm , Hawaiian Ids, $386-463 \mathrm{~m}$ (USNM 29903). - d, Mursia mcdowelli Manning \& Chace, 1990, ${ }^{\star}$, holotype, cl 37.5 mm , Ascension Id., 120-150 m (USNM 221893). e, Mursia microspina Davie \& Short, 1989, ठ cl 24.5 mm , New Caledonia, 385-420 m (MNHN-B 24392). f, Mursia musorstomia sp. nov., ठै, holotype, cl 19.7 mm , New Caledonia, 475 m (MNHN-B 24396).

Suborbital sinus $v$-shaped, suborbital tooth quadrate, pointing distad. Anterolateral margins cristate, prominently tuberculate, tubercles diminishing in size posteriorly. Lateral spine less than 0.1 carapace width, minutely granulate, curving upwards. Posterolateral margins beaded, nearly straight. Posterior margin arcuate, evenly beaded. Chelipeds externally granulate. Merus of cheliped trispinose, distal spine largest, longer than lateral spine. Outer surface of chela with nine conical tubercles in three oblique rows and three tubercles near base of serrate upper crest, lower row with proximal tubercle acuminate, somewhat curved, median and distal tubercles smaller, rounded. Lower margin distinctly serrate, teeth smaller proximally. Dactylus minutely granulate proximally on anterior margin. Upper margin of pereiopods slightly beaded, granulate. Abdominal crest with flattened, subequal, rounded lobes. Cornute distal portion of second male pleopod resembling the Greek letter beta.

Color. - Carapace buff with dark red spots on radial tubercles, cheliped carpus and palmar crest.
REMARKS. - M. cristiata differs from its congeners in having an ogival front, evenly beaded posterior margin and a subquadrate suborbital tooth.

It was the first species of the genus to be figured (Desmarest, 1823) and described (H. Milne Edwards, 1837). However, its name fell prey to repeated misspellings and typographical errors, beginning with H. Milne EdWards who provided four different spellings. The specific name itself, M. cristiata (H. Milne Edwards, 1837), is evidently a misspelling as in subsequent publications H. MILNE EDWARDS named it cristata ( $1840 ; 1843$ ), but also Mursie custata (1840, index) and Mursica cristata (1843, pl. 13). In addition, DE HAAN supplied us with two versions : M. cristimanus (1837:70) and M. cristimana (1837, pl. E; 1839: 73).

Distribution. - Southern Africa, from Natal to Namibia; ? St. Helena Id. (Doflein, 1900); 9-304 m

Mursia curtispina Miers, 1886
Fig. 4 b, 5 g-h
Mursia curtispina Miers, 1886 : 291, pl. 29 fig. 2.
Mursia armata curtispina - Doflein, 1904 : 40, pl. 17 fig. 2, pl. 18 fig. 3.
Not Mursia armata curtispina - Yoкоya, 1933: 115. - Sakai, $1936: 48$, pl. 7 fig. 3; 1937: 87, pl. 11 fig. 4 ( = M. trispinosa Parisi, 1914).
Not Mursia curtispina - SAKAI, $1965: 52$, textfig. 8a-a', pl. 21 fig. 2; 1976: 136, textfig. 74a-a', pl. 43 fig. 1. - Takeda \& Koyama, 1974: 105.

Material examined. - Fiji Ids. "Challenger": stn $173,19^{\circ} 09.35^{\prime} \mathrm{S}, 179^{\circ} 41.50^{\prime} \mathrm{E}, 576 \mathrm{~m}: 1 \mathrm{q}$, cl 29.5, cw 34.0. Holotype (BM 1884.31).

Type locality. - Fiji (Miers, 1886).
DESCRIPTION. - Carapace 1.15 wide as long, surface closely granulate. Radial tubercles minutely granulate. Front with rounded median lobe projecting beyond lateral lobes. Supraorbital margin unifissured. Anterolateral margin with nine, nearly effaced, granulate teeth. Lateral spine about 0.2 carapace width, granular. Posterolateral margin beaded, sinuous. Posterior margin minutely beaded, with sharply triangular lateral teeth and a small median tooth. Merus of cheliped trispinose, distalmost spine as long as lateral spine. External surface of palm with nine tubercles in three oblique rows and three tubercles near base of serrate upper crest. Lowest row with proximal tubercle acuminate, triangular, median and distal tubercles smaller, rounded. Lower margin strongly serrate, teeth smaller proximally. Dactylus basally granulose on exterior surface. Upper margin of pereiopodal meri minutely granulose, as well as external surface of fourth pereiopodal merus. Upper margin of propodi unicristate. Median lobe of abdominal crest wider than lateral lobes, slightly emarginate.

Color. - "(in spirit) yellowish-brown, inclining to pink on chelipedes; the apices of the dactyli of the ambulatory legs are brown-pink, and a patch of the same colour ornaments the inner surface of the palms of the chelipedes." (MIERS, 1886).

Remarks. - Miers (1886) described and depicted M. curtispina quite clearly but later authors sought to synonymize M. curtispina with M. armata (ORTMANN, 1892), later making it a subspecies of M. armata (DOFLEIN, 1904; Ihle, 1918; Balss, 1922). The species described and depicted by Sakal $(1965,1976)$ differs from M. curtispina in having longer spines laterally on carapace and distally on cheliped merus, in the form of inferior tubercles externally on palm and in the shape of the color patch on inner palmar face.

DISTRIBUTION. - Fiji, Indonesia; 470-576 m.

Mursia danigoi sp. nov.
Fig. 1 e, 3 g-i, 5 a -b
Material examined and types. - Philippines. Musorstom $1: \operatorname{stn} 58,13^{\circ} 58.0^{\prime} \mathrm{N}, 120^{\circ} 13.7^{\prime} \mathrm{E}, 143-178 \mathrm{~m}, 26$ March 1976:1 $\mathrm{\delta}^{\circ}$, cl 45, cw 55, mcw 71 (MNHN-B 22369). Holotype. - Stn 58, 13 ${ }^{\circ} 58.0^{\prime} \mathrm{N}, 120^{\circ} 13.7^{\prime} \mathrm{E}, 143-178 \mathrm{~m}$, 26 March $1976: 1$ ס , cl 44.6, cw 55.2, mcw 71; 1 9, cl 26.5, cw 31.7, mow 43 (MNHN-B 22371). Paratypes. - Stn 71, $14^{\circ} 09.3^{\prime} \mathrm{N}, 120^{\circ} 26.2^{\prime} \mathrm{E}, 174-204 \mathrm{~m}, 28$ March $1976: 1$ ¢ , cl 37.8, cw 45.2, mcw 60.2 (MNHN-B 22368).

MUSORSTOM $2: \operatorname{stn} 59,14^{\circ} 00^{\prime} \mathrm{N}, 120^{\circ} 17^{\prime} \mathrm{E}, 186-190 \mathrm{~m}, 28$ November $1980: 1 \delta, \mathrm{cl} 46.1, \mathrm{cw} \mathrm{56.5}, \mathrm{mcw} 75.4 ; 2$ q juv., cl 27.3, 13.3, cw 32, mcw 45.1 (MNHN-B 22366).

MUSORSTOM $3: \operatorname{stn} 88,14^{\circ} 01^{\prime} \mathrm{N}, 120^{\circ} 17^{\prime} \mathrm{E}, 183-187 \mathrm{~m}, 31 \mathrm{May} 1985: 1$ क, cl 37.1, cw 44.2, mcw 56.9 (MNHN-B 22367).

DESCRIPTION. - Carapace 1.2 wide as long, surface granulose. Radial tubercules prominent, minutely granulate. Median frontal lobe triangular, projecting beyond triangulate lateral lobes. Supraorbital margin unifissured. Suborbital sinus v-shaped, suborbital tooth triangulate pointing distad. Anterolateral margins distinctly dentate, teeth diminishing in size anteriorly, posteriorly. Lateral spine reaching one seventh carapace width, minutely granulate, curved upwards. Posterolateral margins beaded, angled medially. Posterior margin with lateral teeth, triangular, flattened, projecting further than median lobe. Chelipeds externally granulate. Merus of cheliped quadrispinose, distal spine largest, half as long as lateral spine. Outer surface of chela with nine tubercles in three oblique rows and two tubercles near base of serrate upper crest; lowest row with proximal tubercle acuminate, keel-like, median and distal tubercles rounded, with subsidiary denticles between teeth. Lower margin prominently serrate, teeth smaller proximally. Dactylus minutely granulate proximally on anterior margin. Upper margin of pereiopods nearly rounded, minutely granulate. Abdominal crest with flattened lobes, median lobe subquadrate, lateral lobes rounded. Cornute distal portion of second male pleopod somewhat beta-shaped.

Color (in alcohol). - Inner palmar face with elongate vertical red patch at base of dactylus. Four red dots on distal margin of buccal cavity.

ETYMOLOGY. - The specific name was chosen in recognition of the valuable assistance extended during several of the MUSORSTOM cruises by Adolphe Danigo, engineer on the research vessels "Vauban " and "Alis".

Remarks. - M. danigoi sp. nov. resembles M. africana, M. mcdowelli and M. spinimanus in general body shape, however it is easily distinguished from each. M. africana differs in having a bispinose merus of cheliped and hook-shaped second male pleopod. M. mcdowelli differs in having a bifissured supraorbital margin, trispinose merus of cheliped and coarse granulation of carapace and chelipeds. M. spinimanus differs in having a wider carapace, longer lateral carapace spine, minute anterolateral teeth and fine granulation on the carapace and chelipeds.

Distribution. - Known only from the type locality, Philippines; 143-204 m.

Fig. 5. - Cheliped, external and ventral views : a-b, Mursia danigoi sp. nov., $\delta$, holotype, cl 45 mm , Philippines, 143178 m (MNHN-B 22369). - c-d, Mursia bicritimana Alcock \& Anderson, 1894, $\delta$, syntype, cl 19.1 mm , Nicobar Ids, $124-271 \mathrm{~m}$ (BM 1898.8.26.3). - e-f, Mursia cristiata H. Milne Edwards, 1837, $\delta$ cl 27.4 mm , South Africa, Simon's Bay, $9-33$ m (BM 1884.31). - g-h, Mursia curtispina Miers, 1886, 9 , holotype, cl 29.5 mm , Fiji Ids, 576 m (BM 1884.31).



Fig. 6. - Second pleopod male with enlargement of distal part : a-c, Mursia cristiata H. Milne Edwards, 1837, $\delta^{t} \mathrm{cl} 27.4 \mathrm{~mm}$, South Africa, Simon's Bay, $9-33 \mathrm{~m}$ (BM 1884.31). - d-e, Mursia hawaiiensis Rathbun, 1893, $\delta^{\circ}$ cl 22.9 mm , Hawaiian Ids, $386-463 \mathrm{~m}$ (USNM 29903). - f-g, Mursia mcdowelli Manning \& Chace, 1990, $\delta^{\circ}$, holotype, cl 37.5 mm , Ascension Id., 120-150 m (USNM 221893). - h-i, Mursia microspina Davie \& Short, 1989, ठ cl 24.5 mm , New Caledonia, 385-420 m (MNHN-B 24390).

Mursia flamma sp. nov.
Fig. 7 a, 9 a-b, $10 \mathrm{c}-\mathrm{d}$
Mursia armata curtispina-Grindley 1961: 132, fig. 4.
Mursia curtispina - Sankarankutty \& Subramanian, 1976:21.

MATERIAL EXAMINED AND TYPES. —Madagascar. "Vauban": $\operatorname{stn} 8,12^{\circ} 43^{\prime} \mathrm{S}, 48^{\circ} 14^{\prime} \mathrm{E}, 370 \mathrm{~m}, 14$ April $1971: 1 \delta^{\circ}$. cl 57.9, cw 68.2, mow 76.6. Holotype; 1 juv., cl 32.1, cw 37.6 (MNHN-B 24371). - $\operatorname{Stn} 4,12^{\circ} 52^{\prime} \mathrm{S}, 48^{\circ} 10{ }^{\circ} \mathrm{E}, 400-$ $410 \mathrm{~m}, 4$ March $1971: 1$ juv., cl 20.8, cw 25.1 (MNHN-B 24370). - Stn 10, $12^{\circ} 43^{\prime} \mathrm{S}, 48^{\circ} 15^{\prime} \mathrm{E}, 348-360 \mathrm{~m}, 14$ April 1971:39, cl 48.3-66.7, cw 48.6-68.6, mcw 48.6-68.6 (MNHN-B 24373). - Stn 23, $12^{\circ} 42.9^{\prime} \mathrm{S}, 48^{\circ} 12.1^{\prime} \mathrm{E}, 445-$ $455 \mathrm{~m}, 12$ September $1972: 1 \delta^{\circ}$, cl 32.7, cw 38.3 (MNHN-B 24375). - Stn $31,12^{\circ} 34.1^{\prime} \mathrm{S}, 48^{\circ} 18.3^{\circ} \mathrm{E}, 310-320 \mathrm{~m}$, 13 September $1972: 1 \delta$, cl 15.6, cw 17.9, mcw 24.3; 2 juv., cl 16.3, 30.3, cw 18.7, 35.5, mcw 25.7, 45.5 (MNHN-B 24411).
"FAO $60^{\prime \prime}: \operatorname{stn} 73 / 43,15^{\circ} 19 ' \mathrm{~S}, 46^{\circ} 15$ 'E, $370 \mathrm{~m}, 11$ May $1973: 1$ ¢, cl 48.7, cw 56.2, mcw 67.7 (MNHN-B 24377).
"Mascareignes $I I I^{\prime \prime}: \operatorname{stn} 1,22^{\circ} 12.3^{\prime} \mathrm{S}, 43^{\circ} 08.2^{\prime} \mathrm{E}, 300-320 \mathrm{~m}, 20$ December 1985:4 \%, cl 44.1-50.4, cw 50.6-58.7, mow 50.4-69.3 (MNHN-B 24378). - Stn 2, $22^{\circ} 20.5^{\prime} \mathrm{S}, 43^{\circ} 06^{\prime} \mathrm{E}, 400 \mathrm{~m}, 20$ December $1985: 2 \delta^{\circ}$, cl 57.6, 53.9, cw 68.6, 64.2, mcw 78.8, 74.2; 1 juv., cl 21.9, cw 25.8 (MNHN-B 24379). - Stn 3, 22 ${ }^{\circ} 27.3^{\prime} \mathrm{S}, 43^{\circ} 07^{\prime} \mathrm{E}, 35 \mathrm{~m}$, 20 December 1985: $1 \delta^{\circ}$, cl 55.7, cw 65.2, mcw 74.8 (MNHN-B 24380). - Stn 4, $22^{\circ} 19.2^{\prime} \mathrm{S}, 43^{\circ} 06.8^{\prime} \mathrm{E}, 400-410 \mathrm{~m}$, 20 December 1985: 1 ठิ, cl 24.2, cw 28.3, mcw 38.7; 1 ㅇ, cl 23.2, cw 27.0, mcw 34.9 (MNHN-B 24381). - Stn 6, $22^{\circ} 17.3^{\prime} \mathrm{S}, 43^{\circ} 04.3^{\prime} \mathrm{E}, 425-450 \mathrm{~m}, 21$ December 1985 : 1 juv., cl 23.1, cw 26.8, mcw 38.0 (MNHN-B 24382). - Stn 13, $22^{\circ} 17.8^{\prime} \mathrm{S}, 43^{\circ} 04.8^{\prime} \mathrm{E}, 425 \mathrm{~m}, 23$ December 1985: $1 \mathrm{\delta}^{\circ}$, cl 55.9 , cw 65.3, mcw 74.9 (MNHN-B 24479). - Stn 15, $22^{\circ} 25.2^{\prime} \mathrm{S}, 43^{\circ} 05^{\prime} \mathrm{E}, 425-460 \mathrm{~m}, 1$ January $1986: 1$, cl 46.7, cw 53.9 , mow 64.2; 1 juv., cl 33.6, cw 40.2, mcw 51.0 (MNHN-B 24383). - Stn 45, $22^{\circ} 25.6^{\prime} \mathrm{S}, 43^{\circ} 05.3^{\prime} \mathrm{E}, 475-510 \mathrm{~m}, 23$ January $1986: 1 \mathrm{q}$, cl 47.2, cw 55.1, mcw 63.0 (MNHN-B 24384). - Stn 57, $22^{\circ} 26^{\prime} \mathrm{S}, 43^{\circ} 05.8^{\prime} \mathrm{E}, 460 \mathrm{~m}, 17$ October $1986: 2$ juv., cl 31.5, 33.6, cw 36.9, 39.5, mew 47.1, 51.7 (MNHN-B 24385). - Stn $69,22^{\circ} 21.9^{\prime} \mathrm{S}, 43^{\circ} 04.8^{\prime} \mathrm{E}, 350-420 \mathrm{~m}, 21$ October 1986 : 1 ot cl 50.1, cw 65.3, mcw 73.9; 1 ㅇ, cl 46.6, cw 54.3, mcw 63.6 (MNHN-B 24386). - Stn 117, 22 ${ }^{\circ} 15 ' \mathrm{~S}, 43^{\circ} 06.5^{\prime} \mathrm{E}, 370 \mathrm{~m}$, 28 November 1986: 1 juv., cl 25, cw 29.9, mcw 36.6 (MNHN-B 24387).

South Africa. Off Natal, between Durban and Tugela mouth, October 1960, coll. P. A. Clancey : 1 of, cl 58.3, cw 70.7, mcw 79.7 (SAM A.10582).

## TYPE LOCALITY. - Madagascar.

DESCRIPTION. - Carapace 1.2 wide as long, surface distinctly granulate. Radial tubercles prominent, granulate. Front with triangular median lobe projecting beyond lateral lobes. Supraorbital margin unifissured. Anterolateral margin with nine, nearly effaced, granulate teeth. Lateral spine short, about 0.07 carapace width, granular. Posterolateral margin beaded, sinuous. Posterior margin with sharply triangular teeth. Merus of cheliped trispinose, distalmost spine as long as lateral spine. External surface of palm with nine tubercles in three oblique rows and three tubercles near base of serrate upper crest. Lowest row with proximal tubercle slender, acuminate, median and distal tubercles thickset, triangular. Lower margin strongly serrate, teeth smaller proximally. Dactylus basally granulose on exterior surface. Upper margin of pereiopodal meri, carpi distinctly granulose. Upper margin of propodi unicristate. Median lobe of abdominal crest wider than lateral lobes, slightly emarginate. Second male pleopod distally crook-shaped, tip slightly outcurved.

Etymology. - The specific name is from the Latin and refers to Grindley's specimen which was painted a flame-red, presumably imitating its natural hues.

REMARKS. - M. flamma closely resembles M. curtispina in carapace shape, however it differs from it in having a shorter lateral spine on carapace and distal spine on cheliped merus, and distinctly granulose meri and carpi of pereiopods.

Distribution. - Tanzania, South Africa, Madagascar, 35-510 m.

## Mursia hawaiiensis Rathbun, 1893

Fig. $4 \mathrm{c}, 6 \mathrm{~d}-\mathrm{e}, 8 \mathrm{a}-\mathrm{b}$
Mursia hawaiensis Rathbun, 1893 : 252; 1906:887, pl. 18, figs 3-4. - Takeda \& Koyama, 1974: 105.
Mursia armata hawaiiensis - Doflein, 1904: 41.
Not Mursia armata hawaiiensis - IHLE, 1918: 180.
Not Mursia curtispina hawaiiensis - SaKaI, 1965 : 54, textfigs 8d-d'.
Not Mursia hawaiiensis - Sakai, 1976 : 137, textfigs 74d-d', pl. 42 fig. 1. - Miyake, 1983 : 199 (list).

Material examined. - Hawaiian Ids. "Albatross", stn 3472, Kaiwi Channel, $21^{\circ} 12^{\prime} \mathrm{N}, 157^{\circ} 49^{\prime} \mathrm{W}, 540 \mathrm{~m}$, 4 December 1891:1 $\delta$, cl 29.1, cw 36.2, mcw 38.7 (USNM 17515). Holotype. - Stn 3810, Ohau Id., off Honolulu Light, 386-463 m, 27 March 1902 : 1 ô, cl 22.9, cw 28.4, mcw 30.6 (USNM 29903). - Stn 3919, Ohau Id., off Diamond Head, $470-402 \mathrm{~m}, 6$ May 1902: 1 ot, cl 29.6, cw 36.3, mcw 39.5; 1 o, cl 29.1, cw 36.2, mcw 39.3 (USNM 29905). - Stn 4081, Maui Id., off Puniawa Point, 370-402 m, 21 July $1902: 1$ \& juv., cl 22.5, cw 27.0, mow 30.6 (USNM 29910). - Stn 4114, Ohau Id., off Kahuku Point, 282-357 m, 25 July 1902: 1 ס, cl 32.2, cw 39.8, mew 43.6; 1 juv., cl 16.3 (USNM 29911). - Stn 4115, Ohau Id., off Kahuku Point, 357-441 m, 25 July 1902 : $1 \delta^{\circ}$, cl 34.3, cw 42.7, mew 46.9; 19 , cl 28.7, cw 35.0, mew 37.9 (USNM 29912). - Stn 4116, Ohau Id., off Kahuku Point, 441-516 m, 25 July 1902: 2 ㅇ, cl 28.5, 35.9, cw 29.4, 38.2, mow 36.0, 38.6 (USNM 29913). - Stn 4121, Ohau Id., off Kahuku Point, $395-459 \mathrm{~m}, 25$ July 1902 : broken shell (USNM 29915). - Stn 4122, Ohau Id., off Barbers Point, $351-644 \mathrm{~m}, 26$ July $1902: 1$ б, cl 26.6 , cw 32.6 , mcw $36.3 ; 1$ ㅇ, cl 29.3 , cw 36.0 , mcw 38.1 (USNM 29916). $\operatorname{Stn} 4130$, Kauai Id., off Hanamaulu warehouse, $518-565 \mathrm{~m}$, July $1902: 2$ ¢, cl 30.6, 37.1, cw 37.8, 40.0, mcw 39.6, 41.4 (USNM 29917).

Polynesia. Paumotu Archipelago, Rahiroa Atoll, 1252 m, 24 September 1899, id. M. J. Rathbun : 1 of yg, cl 21.7, cw 26.4, mew 30.6 (USNM 6907).
N.E. Pacific Ocean. "Prof. Stockman", cruise 18, $\operatorname{stn} 1920,25^{\circ} 44.04^{\prime} \mathrm{S}, 85^{\circ} 24.93^{\prime} \mathrm{W}, 220 \mathrm{~m}$, trap, coll. N. Zarenkov : $2 ¢$, $\mathrm{cl} 30.4,45.8$, $\mathrm{cw} 36.1,48.1$, mcw 40.7, 53.9 (information possibly inaccurate).

Type locality. - Hawaiian Islands (Rathbun 1893).
DESCRIPTION. - Carapace 1.2 wide as long, surface closely covered with minute granules. Radial tubercles indistinct. Median frontal lobe projecting forward beyond rounded lateral lobes. Supraorbital margin unifissured. Suborbital sinus v-shaped, suborbital tooth triangular, apex pointing inward. Anterolateral margins cristate, tubercles indistinct. Lateral spine short, about 0.04 carapace width, minutely granulate, curved upwards. Posterolateral margin beaded, sinuous. Lateral lobes of posterior margin triangular, flattened, upcurved. Chelipeds externally granulate. Merus of cheliped trispinose. Outer surface of chela with nine tubercles in three oblique rows and three tubercles near base of serrate upper crest, lowest row with proximal tubercle acuminate, keel-shaped; median, distal tubercles elongate, crested. Lower margin serrate, teeth smaller proximally. Dactylus minutely granulate on anterior margin. Upper margin of pereiopodal meri nearly rounded, granulate. Abdominal crest deeply cut, median lobe widest. Cornute distal portion of second male pleopod somewhat beta-shaped.

Color (in alcohol). - "tinges of red on the carapace and chelipeds and an elongated patch of red on the inner surface of the hand, near the dactyl" (RatHBun, 1893).

REMARKS. - M. aspera, M. microspina, M. flamma and M. hawaiiensis alone among their congeners possess a lateral spine shorter than 0.07 carapace width. $M$. aspera differs from the rest in having conical tubercles on external surface of chelipeds and on upper margin of pereiopodal meri. M. hawaiiensis differs from M. microspina in having nearly effaced granules on carapace, median lobe of abdominal crest wider than lateral lobes and second male pleopod beta-shaped distally and from M. flamma in lacking median lobe on posterior margin of carapace.

IHLE (1918) specimen differs from $M$. hawaiiensis in the number of tubercular radial lines on carapace and number of spines on ischium. The species described and depicted by SAKAI $(1965,1976)$ differs from M. hawaiiensis in having the second male pleopod crook-shaped, in the form of the inferior tubercles externally on palm and in the prominent radial tubercles on carapace. MIYAKE (1983) followed SAKAI's list.

Distribution. - Hawaiian Islands, Paumotu Archipelago, East Pacific (W of San Felix Id, $25^{\circ} 44.04^{\prime}$ 'S, $85^{\circ} 24.93{ }^{\prime} \mathrm{W}$ ); 97-1252 m.

Mursia mcdowelli Manning \& Chace, 1990
Fig. 4 d, 6 f-g, 8 c-d
Mursia mcdowelli Manning \& Chace, 1990 : 45, figs 26-27.
Material examined. - South Atlantic Ocean : Ascension Id., off Georgetown Pierhead, $120-150 \mathrm{~m}$, March 1980, coll. M. McDowell : $1 \delta^{\top}$, cl 37.5, cw 47.3, mcw 60.4 (USNM 221893). Holotype.

DESCRIPTION. - Carapace 1.25 wide as long, surface covered with granules, smaller and more closely set posteriorly. Radial tubercules distinct. Median frontal lobe acuminate, projecting forward beyond lateral lobes. Supraorbital margin bifissured. Suborbital sinus v-shaped, suborbital tooth triangular, apex pointing inward. Anterolateral margins cristate, irregularly granulate. Lateral spine 0.14 carapace width, minutely granulate, straight. Posterolateral margin beaded, sinuous. Lateral lobes of posterior margin rounded, projecting beyond median lobe. Chelipeds extemally with conic granules. Merus of cheliped trispinose, distal spine as long as lateral spine. External surface of chela with tubercles in three oblique rows, median ridge granulose, unidentate proximally, interrupted distally. Palmar crest deeply serrate. Lower margin serrulate, teeth smaller proximally. Dactylus minutely granulate proximally on anterior margin. Upper margin of pereiopodal carpi nearly rounded, granulate. Abdominal crest with wide median lobe. Cornute distal portion of second male pleopod shaped like the Greek letter beta.

Remarks. - Among their congeners only $M$. mcdowelli and $M$. bicristimana possess a granulose median ridge proximally on external surface of chela. However, M. mcdowelli differs from M. bicristimana in having a bifissured supraorbital margin, smaller granules posteriorly on carapace and a beta-shaped second male pleopod.

Distribution. - Known only from the type locality, Ascension Island, South Atlantic Ocean (Manning \& Chace, 1990); 120-150 m.

Mursia microspina Davie \& Short, 1989
Fig. 4 e, 6 h-i, 8 e-f, 12
Mursia microspina Davie \& Short, $1989: 172$, figs $9 \mathrm{a}-\mathrm{g}, 10$. Mursia aspera - BABA, 1986 : 221, pl. 165.

Material examined. - New Caledonia. Musorstom 5 : $\operatorname{stn} 273,24^{\circ} 43.02^{\prime} \mathrm{S}, 159^{\circ} 43.26^{\prime} \mathrm{E}, 290 \mathrm{~m}, 9$ October $1986: 18$, cl 23.1, cw 25.5, mcw 28.1 (MNHN-B 24388). - Stn 299, 22 $2^{\circ} 47.70^{\prime} \mathrm{S}, 159^{\circ} 23.70^{\prime} \mathrm{E}, 360-390 \mathrm{~m}$, 11 October 1986: 1 ठ, cl 19.7, cw 22.1, mcw 25.7 (MNHN-B 24389). - Stn 304, 22 ${ }^{\circ} 10.34$ 'S, $159^{\circ} 25.51^{\prime} \mathrm{E}, 385-420$ m, 12 October $1986: 1$ ठ, cl 24.5, cw 27.8, mcw 30.5 (MNHN-B 22372).

Smib $6: \operatorname{stn} 124,18^{\circ} 56.0^{\prime} \mathrm{S}, 163^{\circ} 24.5^{\prime} \mathrm{E}, 360-405 \mathrm{~m}, 3$ March $1991: 1$ q, cl 25.1, cw 28.5, mcw 30.2 (MNHN-B 22373).

Loyalty Islands. Musorstom $6: \operatorname{stn} 457,21^{\circ} 00^{\prime} \mathrm{S}, 167^{\circ} 28.71$ ' $\mathrm{E}, 353 \mathrm{~m}, 20$ February $1989: 1$ juv., cl 11.2, cw 12.2, mcw 13.0 (MNHN-B 24391). - Stn 464, $21^{\circ} 02.30^{\prime} \mathrm{S}, 167^{\circ} 31.60^{\prime} \mathrm{E}, 430 \mathrm{~m}, 21$ February $1989: 1 \mathrm{o}$, cl 30.9, cw 35.5, mow 39.2 (MNHN-B 24392). - Stn $480,21^{\circ} 08.50^{\prime} \mathrm{S}, 167^{\circ} 55.98^{\prime} \mathrm{E}, 380 \mathrm{~m}, 22$ February $1989: 1$ juv., cl 9.5 (MNHN-B 24393).

Type locality. - Southeast Queensland (Davie \& Short, 1989).
DESCRIPTION. - Carapace 1.1 wide as long, surface closely covered with granules, effaced anteriorly. Radial tubercles distinct. Median frontal lobe projecting forward beyond lateral lobes. Supraorbital margin unifissured. Suborbital sinus v-shaped, suborbital tooth triangular, apex pointing inward. Anterolateral margins cristate, indistinctly tuberculate. Lateral spine short, 0.05 carapace width, minutely granulate, curved upwards. Posterolateral margin beaded, angled medially. Lateral lobes of posterior margin triangular, curved, median lobe nearly indistinct. Chelipeds externally granulate. Merus of cheliped trispinose, distal spine longer than lateral spine. Outer surface of chela with nine tubercles in three oblique rows and three tubercles near base of serrate upper crest, lowermost row with proximal tubercle acuminate. Lower margin minutely serrate. Dactylus minutely granulate proximally on anterior margin. Upper margin of pereiopodal carpi nearly rounded, not granulate. Abdominal crest deeply cut, lobes rounded. Cornute distal portion of second male pleopod crook-shaped, tip outcurved.

Color (in alcohol). - Branchial regions tinged red. Distal margin of buccal cavity with two red spots. Chelipeds pale coral, fingers white. Inner palmar face with a large oculus-shaped coral-colored patch.

