

**CONTRIBUTION TO THE KNOWLEDGE OF THE AMPHIPODA
141. QUADRUS VAGABUNDUS, NEW GENUS AND SPECIES,
AND REVISION OF GENUS ERIOPISELLA CHEVR.
(GAMMARIDEA)**

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ABSTRACT

New genus and species of Gammaridean Amphipoda, *Quadrus vagabundus*, n. gen., n. sp., is described from the coasts of Sri Lanka (=Ceylon). Genus *Eriopisella* Chevreux 1920 is revised and new genera *Cephalopisella*, n. gen. (type-species: *Eriopisella propagatio* Imbach, 1967) and *Spiniferopisella*, n. gen. (type-species: *Eriopisella spinosa* Ledoyer, 1979), are established. New diagnosis of genera *Eriopisella* Chevr. 1920, *Madapisella* Stock 1980 and *Nippopisella* Stock 1980 are given. Identity of genus *Incratella* J. L. Barnard & Drummond, 1982, and subgenus *Cheirocratus* (*Indocratus*) Ledoyer, 1982, is established.

IZVOD

141. PRILOG POZNAVANJU AMPHIPODA, QUADRUS VAGABUNDUS, NOVI ROD I VRSTA, I REVIZIJA RODA ERIOPISELLA CHEVR. (GAMMARIDEA)

Novi rod i vrsta za nauku od Gammaridnih *Amphipoda*, *Quadrus vagabundus*, opisan je sa obale Sri Lanke (=Cejlona). Izvršena je revizija roda *Eriopisella* Chevreux 1920, i postavljena su dva nova roda, rodovi *Cephalopisella* (tip roda: *Eriopisella propagatio* Imbach, 1967) i *Spiniferopisella* (tip roda: *Eriopisella spinosa* Ledoyer, 1979). Date su nove dijagnoze rodova *Eriopisella* Chevr. 1920, *Madapisella* Stock 1980 i *Nippopisella* Stock 1980. Utvrđena je identičnost roda *Incratella* J. L. Barnard & Drummond 1982 i podroda *Cheirocratus* (*Indocratus*) Ledoyer, 1982.

INTRODUCTION

During our recent study of some *Amphipoda* collected along the coasts of Sri Lanka (=Ceylon), several very interesting taxa have been discovered, among them also the members of new genus and species mentioned below. During the study of affinity of this genus, it was established the heterogeneity of known *Eriopisella* genus, and it was divided into three genera.

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Genus QUADRUS new. genus

Type - species: *Quadrus vagabundus*, n. sp.

Diagnosis: Body smooth, laterally compressed, urosomites free. Head with short lateral cephalic lobes and developed ventro-anterior sinus. Eyes present. Antenna 1 longer than 2, peduncular segment 2 of antenna 1 longer than segment 1, segment 3 elongated; accessory flagellum 2-segmented. Antenna 2 slender, peduncular segment 3 short, flagellum longer than last peduncular segment, antennal gland cone short.

Labrum entire, subrounded; labium with small but distinct inner lobes. Mandibular molar triturative, incisor toothed, setae present between molar and incisor; palp vestigial, 1-segmented, with long distal seta.

Maxilla 1 inner plate conical, with row of distolateral plumose setae, outer plate with 9 spines, palp 2-segmented: left and right palp are asymmetric to each other. Maxilla 2 inner plate with lateral setae, facial setae absent. Maxilliped normal, inner and outer plate with marginal spines, palp 3-segmented, nail present.

Coxae 1-4 moderate, coxa 1 unproduced, with parallel lateral margins, coxa 4 unlobed, coxa 5 almost as long as 4, coxae 6-7 shorter. Gnathopods 1-2 dissimilar, gnathopod 1 much smaller than 2, with long unlobed segment 5 and transverse palm. Gnathopod 2 left and right similar to each other, with unlobed segment 5 short in males; segment 6 large, with oblique palm. Pereopods 3-4 normal. Pereopods 5-7 similar to each other, with segment 2 bearing ventroposterior tooth. Pleopods normal.

Uropods 1-2 biramous, normal, with lateral and distal spines; peduncle of uropod 1 with ventrofacial spine. Uropod 3 much exceeding tip of uropods 1-2, parviramus, inner ramus scale-like, outer ramus 2-segmented, second segment short.

Telson short, incised nearly to the basis, lobes pointed distally. Coxal gills normal, ovoid, occur on thoracal segments 2-6. Oostegys narrow, setose, occur on thoracal segments 2-5.

Sexual dimorphism present (gnathopods 1-2, antennae 1-2).

Taxa: *vagabundus* n. sp.

Remarks and affinities: Genus *Quadrus* belongs to *Melita-Eriopisella* group of genera. He is very allied to the genus *Psammoniphargus* Ruffo 1956, based on vestigial mandibular palp,

but *Psammoniphargus* differs from *Quadrus* by lobed coxa 4, absence of inner lobe of labium, absence of eyes, outer plate of maxilla 1 with 6 spines only, etc.

Genus *Tegano* J. L. Barnard & G. Karaman, 1982 is also very allied to genus *Quadrus*, but differs from *Quadrus* by 2-segmented mandibular palp, mucronate body, strongly prominent lateral cephalic lobes, longer accessory flagellum, etc.

Genus *Nainaloa* G. Karaman & J. L. Barnard, 1979 differs from *Quadrus* by stronger, 3-segmented mandibular palp, setose outer plate of maxilliped, large and distinctly lobed segment 2 of pereopods 5-7, quadrate telson, partially reduced uropod 1, etc.

Genus *Spiniferopisella* n. gen. has also feeble mandibular palp and strongly dissimilar gnathopods 1-2, but it differs from *Quadrus* by 3-segmented mandibular palp, lobed coxa 4, absence of lateral setae on inner plate of maxilla 2, etc.

Evidently, genera *Tegano*, *Psammogammarus*, *Quadrus*, *Spiniferopisella* and some allied genera are rather similar to each other and they are all monotypic genera. Discovery of new taxa of these genera in the future will show the real validity of all these genera.

QUADRUS VAGABUNDUS, new species

Figs.: I-IV

Description: Male 3 mm: Body smooth, metasomsegments each with 2-3 very short dorsal setae; urosomite 1 at dorsoposterior margin with 2 median setae, urosomite 2 on each side with 2 spines (fig. III, 9).

Head without distinct rostrum, lateral cephalic lobes short, subrounded, ventroanterior sinus present (fig. 1, 7), eyes well developed, ovoid, smaller than diameter of peduncle of antenna 1.

Antenna 1 almost reaching the body-length, peduncular segment 1 slightly inflated, with 2 ventral spines (fig. III, 1), peduncular segment 2 slender, longer than 1; ped. segment 3 elongated, exceeding half of ped. segment 2; main flagellum 13-segmented, segments stout, without aesthetascs (fig. III, 1); accessory flagellum short, 2-segmented: second segment vestigial (fig. III, 1), accessory flagellum not reaching the tip of first flagellar segment. Peduncle and flagellum of antennae 1-2 is covered by numerous long curled woolen setae (fig. III, 1, 2).

Antenna 2 is shorter and slightly more slender than 1, peduncular segment 3 short (fig. III, 2); peduncular segments 4-5 subequal long, flagellum 7-segmented; antennal gland cone short, not reaching tip of third peduncular segment.



Fig. I. *Quadrus vagabundus*, n. gen., n. sp., Jaffna, male 3 mm: 1-4 = gnathopod 1; 5-6 = gnathopod 2; 7 = head; 8 = maxilla 2; 9 = labium.

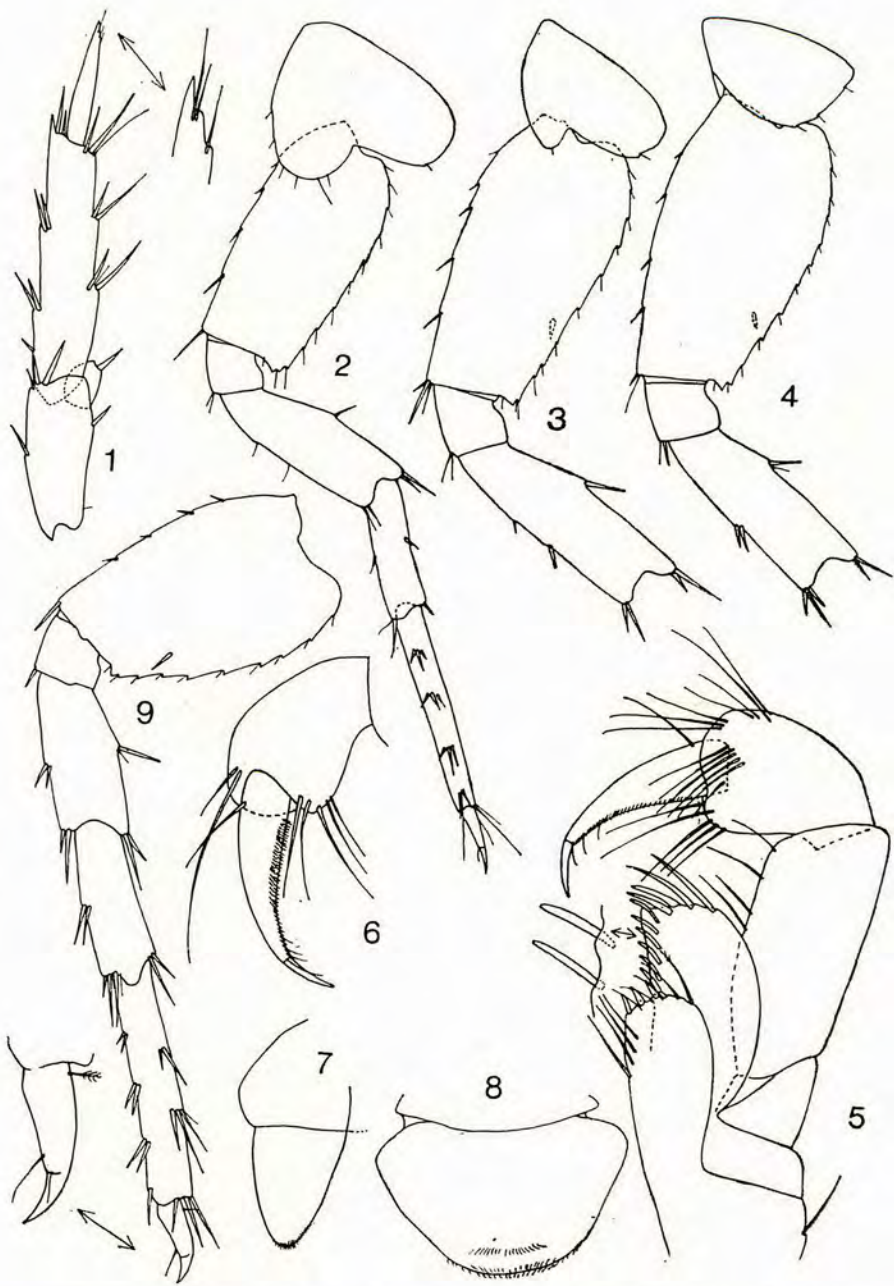


Fig. II. *Quadrus vagabundus*, n. gen., n. sp., Jaffna, male 3 mm: 1 = uropod 3; 2-4 = pereopods 5-7; 5-6 = maxilliped; 7-8 = labrum; 9 = pereopod 7, male 2.8 mm.

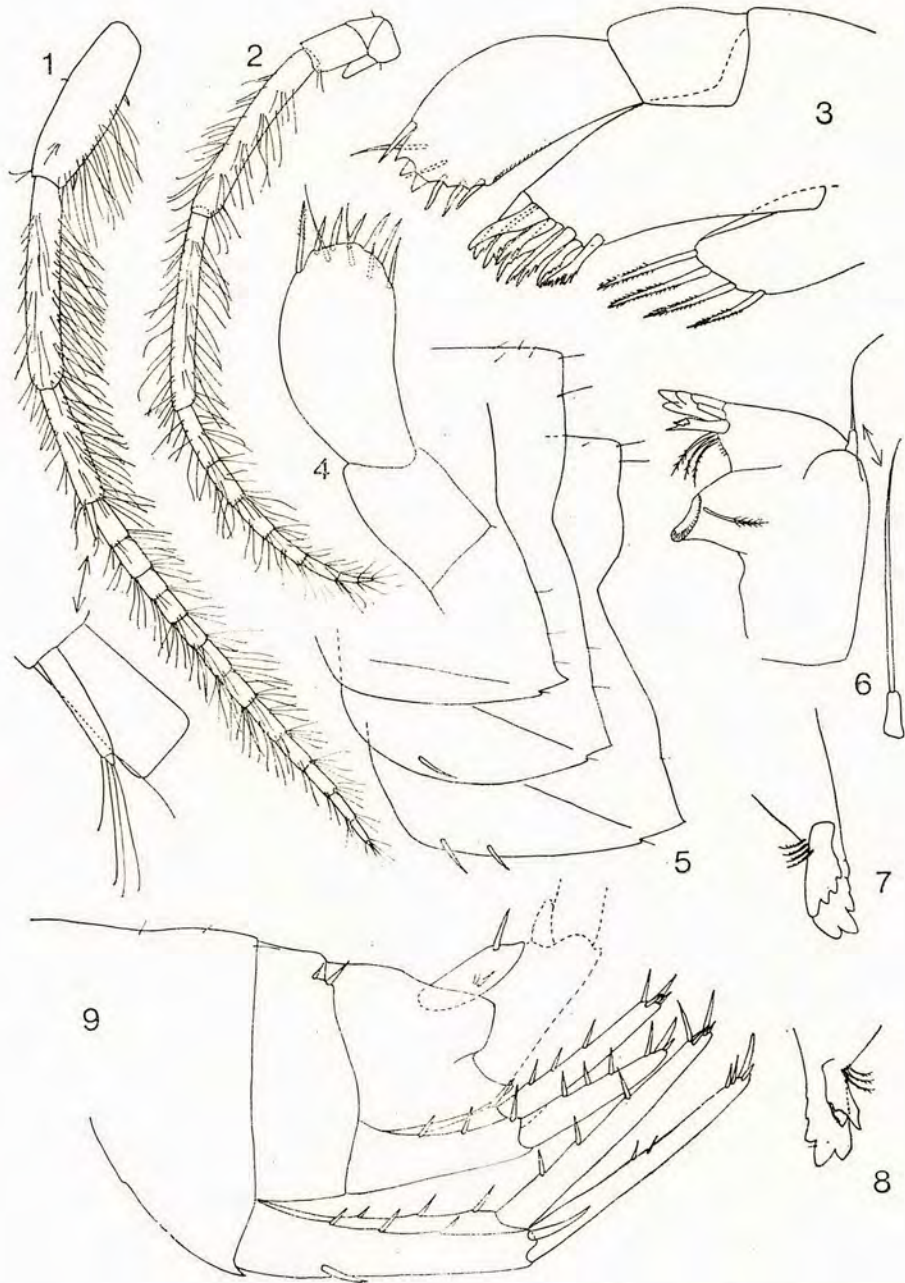


Fig. III. *Quadrus vagabundus*, n. gen., n. sp., Jaffna, male 3 mm: 1 = antenna 1; 2 = antenna 2; 3 = right maxilla 1; 4 = palp of left maxilla 1; 5 = epimeral plates 1-3; 6-8 = mandible; 9 = urosome with uropods 1-2.

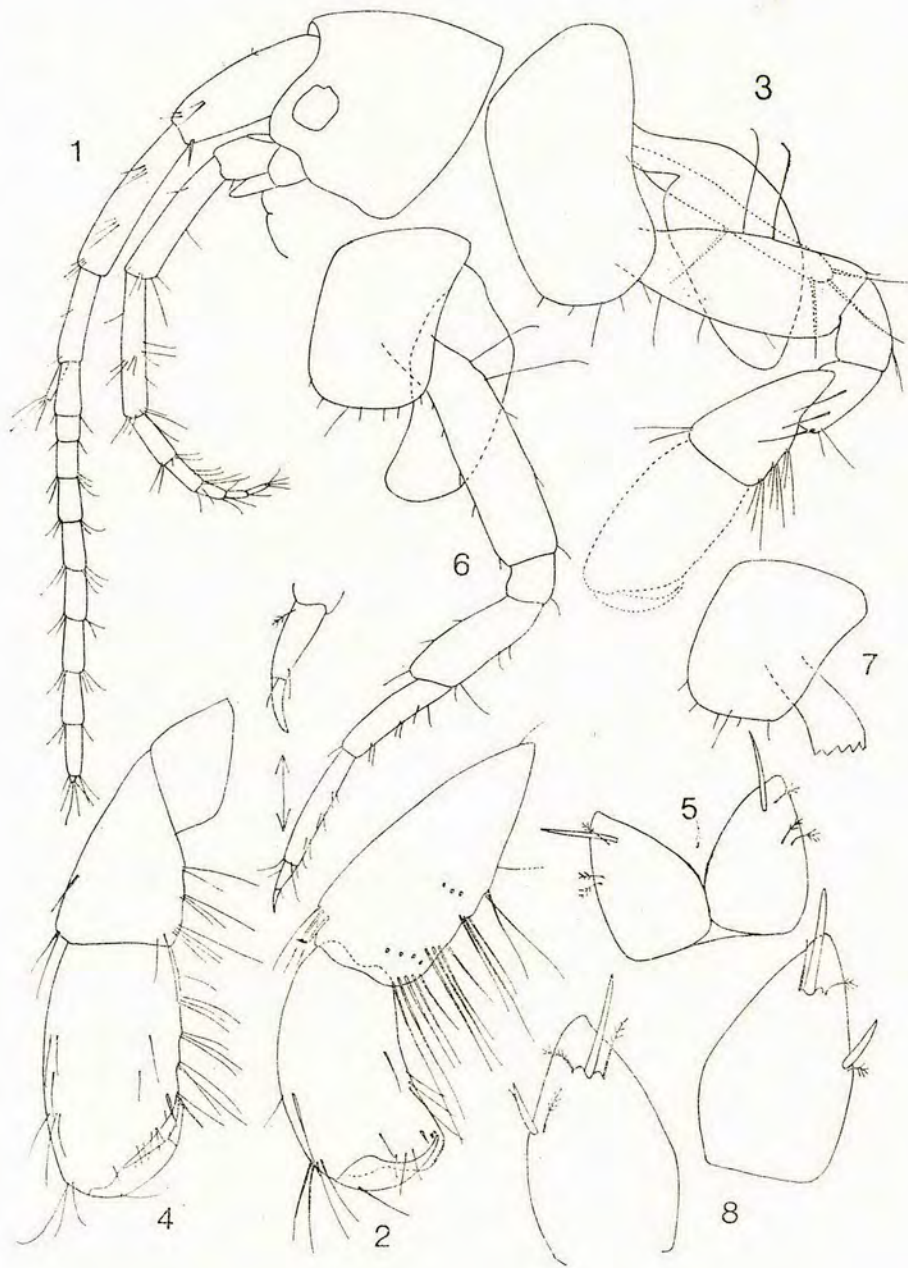


Fig. IV. *Quadrus vagabundus*, n. gen., n. sp., Jaffna, female 2.8 mm: 1 = head with antennae 1-2; 2 = gnathopod 1; 3-4 = gnathopod 2; 5 = telson; 6 = pereopod 3, male 3 mm; 7 = coxa 4, male 3 mm; 8 = telson, male 3 mm.

Labrum entire, trapezoid, epistome prominent, subrounded (fig. II, 7, 8); labium with small, but well visible inner lobes (fig. I, 9). Mandible molar tritulative, incisor toothed, lacinia mobilis dissimilar on left and right mandible (fig. III, 6-8); between incisor and molar appear several setae. Mandibular palp vestigial, 1-segmented, with long distal simple seta (fig. III, 6).

Maxilla 1: inner plate with 4 distolateral plumose strong setae (fig. III, 3), outer plate with 9 toothed spines (8 spines with 2-4 teeth each, 1 spine with 9 teeth); palp of right maxilla with spines and teeth, palp of left maxilla with 7 slender spines (fig. III, 3, 4).

Maxilla 2 both plates with normal distal setae, inner plate with lateral setae, facial setae absent (fig. I, 8).

Maxilliped inner plate exceeding tip of first palp segment, bearing 3 distal spines (fig. II, 5); outer plate with subangular distoinferior corner not reaching tip of second palp segment, and bearing a row of distoinferior lateral spines (fig. II, 5); palp 4-segmented, segment 4 long, with short nail and with 3-4 setae at inner margin (fig. II, 5, 6).

Coxae 1-4 longer than broad, with entire convex ventral margin bearing marginal setae (one median seta is remarkably longer than other setae) (fig. I, 1, 5; IV, 6, 7); coxa 1 not dilated distally, coxa 4 unlobed, not longer than coxa 1. Coxa 5 as long as 4, coxae 5-7 progressively shorter, coxae 5-6 with anterior lobe longer than posterior one (fig. II, 2-4).

Gnathopod 1: segment 2 with 2 long posterior setae (fig. I, 1), segments 3-4 short, segment 5 longer than 6, unlobed, with setose posterior margin; segment 6 recurved, with medially excavated palm and a row of short spine-like setae along inferior margin (fig. I, 3); palm transverse; dactyl short, smooth along inferior margin, closing subchela laterally at inferior side of gnathopod (fig. I, 2, 3), with one dorsal seta (fig. I, 4).

Gnathopod 2: segment 2 with 2 long posterior setae (fig. I, 5), segments 3-4 short, segment 4 with distoposterior tooth; segment 5 short, unlobed; segment 6 large, palm oblique, with proximal dilatation and serrate distoposterior margin, defined by 2 strong setae (fig. I, 5, 6); dactyl smooth at inferior margin, closing subchela at inferior margin of segment 6 where is evident one spine; one median seta appears at outer margin of dactyl (fig. I, 6). Left and right gnathopod 2 are symmetric to each other.

Pereopods 3-4 slender, normal, poorly setose, with dactyl short (fig. IV, 6), pereopod 4 hardly shorter than pereopod 3.

Pereopods 5-7 similar in shape, but pereopod 5 shorter than 7. Segment 2 of pereopods 5-7 narrow, with serrate posterior mar-

gin and well marked ventroposterior tooth (fig. II, 2-4). Inferior face of segment 2 of pereopods 6 and 7 with one median spine (fig. II, 3, 4, 9); segments 3-6 linear, spinose, dactyl short (fig. II, 9).

Epimeral plates 1-3 with sharp ventroposterior corner and with one additional ventral tooth and with smooth posterior margin (fig. III, 5); ventral margin of epimeral plates 2-3 bearing 1-2 spines each.

Pleopods 1-3 similar to each other, slender peduncle smooth, with 2 retinacula; inner ramus slightly longer than outer one, both rami with 9 articles each.

Urosomite 1 near basis of uropod 1-peduncle without spine (fig. III, 9). Uropod 1 peduncle with one facial spine (fig. III, 9), rami subequal, with lateral and distal spines. Uropod 2 inner ramus slightly longer than outer one, both rami with lateral and distal spines (fig. III, 9). Uropod 3 much exceeding tip of uropods 1-2, inner ramus scale-like, short (fig. II, 1); outer ramus 2-segmented, second segment narrow, reaching half of first segment, without lateral armature (fig. II, 1); peduncle slightly exceeding half of first segment of outer ramus.

Telson short, incised nearly to the basis, each lobe with 1 subdistal and 1 outer marginal spine (fig. IV, 8), tip of lobes is not notched.

Coxal gills mentioned in generic diagnosis.

Female 2.8 mm with setose oostegyts: like male with some differences. Antennae 1-2 shorter and poorly setose (fig. IV, 1), peduncular segment 2 of antenna 1 nearly as long as ped. segment 1, ped. segment 3 elongated; main flagellum 10-segmented, segments without aesthetascs; accessory flagellum 2-segmented, short (fig. IV, 1).

Antenna 2 peduncular segments 4-5 subequal long, flagellum 5-6 segmented, hardly longer than last peduncular segment. Antennal gland cone distinctly longer than that in males, reaching tip of third peduncular segment (fig. IV, 1).

Gnathopod 1 segment 5 longer than 6, unlobed (fig. IV, 2), segment 6 with less recurved anterior margin than that in males (fig. IV, 2), dactyl smooth, with 1 outer marginal seta (fig. IV, 2).

Gnathopod 2 segment 5 elongated, but shorter than segment 6, unlobed (fig. IV, 4); segment 6 linear; with oblique palm defined by 2 slender spine-like setae on corner, dactyl with 1 outer marginal seta (fig. IV, 2, 3).

Segment 2 of pereopods 5-7 slightly more broad, like in smaller males (fig. II, 9), segment 2 of pereopods 6-7 with one median inferior spine like that in males. Epimeral plates 1-3 with or

without median ventral additional tooth. Uropods 1-3 like these in males.

Telson incised nearly to the basis, each lobe with 1 subdistal spine, no lateral spines in the specimens in hand (fig. IV, 5).

Oostegyts narrow, with distal long setae (fig. IV, 3).

Variability: Rather variable the shape of segment 2 of pereopods 5-7 (narrower in larger specimens, broader in smaller specimens); epimeral plates with or without ventral additional median tooth, lobes of telson with or without lateral spine. The different length of antennal gland cone between males and females is stable character.

Material examined: SRI LANKA (=Ceylon): Jaffna, Kecrimalai, spring in the sea near coast, October, 1980, several specimens, accompanied by *Ceradomaera plumosa* Led. 1979, *Victoriopisa chilensis* (Chilton, 1921) and *Quadrivisio bengalensis* Stebb. 1907.

Loc. typ.: Jaffna (Sri Lanka).

Holotype: male 3 mm. Holotype and paratypes are deposited in KARAMAN's Collection in Titograd, Yugoslavia.

Remarks: *Quadrus vagabundus* is rather similar to *Tegano seticornis* (Bousfield, 1970), known from Solomon Islands (Rennell) and Bismarck Archipelago (Mussau), but with before mentioned generic differences.

KEY TO THE ERIOPISELLA DIVISION:

1. Segment 2 of pereopod 7 distinctly unlobed (pereopods 5-6 with similar, unlobed segment 2) 2
- Segment 2 of pereopod 7 distinctly lobed (pereopods 5-6 with lobed or unlobed segment 2) 3
2. Coxa 4 unlobed. Segment 5 of gnathopod 2 strongly lobed; palm of gnathopod 1 oblique ERIOPISELLA Chevr. 1920.
- Coxa 4 lobed. Segment 5 of gnathopod 2 unlobed; palm of gnathopod 1 transverse MADAPISELLA Stock 1980.
3. Mandibular palp segment 1 elongated, as long as palp segment 2; flagellum of antenna 2 shorter than last peduncular segment (segment 2 of pereopods 5-6 unlobed, that of pereopod 7 lobed) NIPPOPISELLA Stock 1980.
- Mandibular palp segment 1 short, much shorter than palp segment 2; flagellum of antenna 2 as long as or longer than last peduncular segment 4

4. Lateral cephalic lobes of head produced anteroventrally and partially covering antennal gland cone

CEPHALOPISELLA n. gen.

—Lateral cephalic lobes of head normal, not produced anteroventrally

SPINIFEROPISELLA n. gen.

Genus ERIOPISELLA Chevreux

Syn.: *Eriopisella* Chevreux 1920: 81; Stock 1980: 384.
Eriopisella (part.) Barnard & Barnard 1983: 679.

Type - species: *Eriopisella pusilla* Chevreux, 1920 (monotypy).

Diagnosis: Body smooth, urosomites free. Lateral cephalic lobes of head short, subrounded, with absent or poorly developed ventroanterior sinus; eyes present or absent. Antennae 1-2 normal, antenna 1 longer than 2, with peduncular segment 1 larger and as long as or hardly shorter than peduncular segment 2, segment 3 short; accessory flagellum 1-2 segmented, short. Antenna 2 peduncular segment 3 slightly elongated, flagellum longer than last peduncular segment, antennal gland cone short.

Labrum entire, subrounded. Labium with well developed inner lobes. Mandible molar triturative, incisor toothed; palp longer than mandible, linear, 3-segmented (palp segment 1 short, segments 2 and 3 of various length), palp segment 3 with distal (E) setae only. Maxilla 1 inner plate conical, with 2-3 distal setae only, outer plate with 7-10 spines, palp 2-segmented (asymmetric or not?). Maxilla 2 inner plate with distal setae only (lateral and facial setae absent).

Maxilliped inner plate exceeding tip of first palp segment, outer plate with distoposteral spines, palp 4-segmented, with nail. Coxae 1-4 short, coxa 1 produced anteroventrally, coxa 4 unlobed, coxa 5 nearly as long as 4. Gnathopods 1-2 subchelate, with similar segment 6. Gnathopod 1 poorly smaller than 2, with segment 5 of various length by always elongated, unlobed, segment 6 with oblique palm. Gnathopod 2 segment 5 strongly lobed, segment 6 with oblique palm. Pereopods 3-4 normal. Pereopods 5-7 similar, with unlobed segment 2. Uropods 1-2 biramous, normal, rami prevalently with lateral and distal spines; peduncle of uropod 1 (?) with facial spine. Telson short, incised nearly to the basis, lobes tapering distally.

Taxa: *capensis* K. H. Barnard, 1916; *epimera* Griffiths, 1974; *pusilla* Chevreux, 1920; *sechellensis* (Chevreux, 1901); *upolu* J. L. Barnard, 1970.

Ecology: marine species.

Distribution: France, South Africa, Indopacific region.

Genus CEPHALOPISELLA, new genus

Syn.: *Eriopisella* (part.) Barnard & Barnard 1983: 679.

Type - species: *Eriopisella propagatio* Imbach, 1967.

Diagnosis: Body smooth, urosomites free. Head without rostrum, lateral cephalic lobes produced ventroanteriorly, covering partially antennal gland cone. Eyes absent. Antennae 1-2 normal, antenna 1 longer than 2, with peduncular segment 2 longer than 1, segment 3 short, accessory flagellum 1-segmented. Antenna 2 peduncular segment 3 short, flagellum nearly as long as last peduncular segment, antennal gland cone short.

Labrum entire, subrounded. Labium unknown. Mandible with triturative molar, incisor toothed, between incisor and molar no setae; palp slender, linear, longer than mandible, 3-segmented: segment 1 short, segment 2 shorter than 3, bearing lateral setae, segment 3 with distal (E) setae only. Maxilla 1 inner plate with distal setae only, palp 2-segmented. Maxilla 2 inner plate with distal setae only, lateral and facial setae absent. Maxilliped normal, outer plate (?with setae), palp 4-segmented, with nail.

Coxae very short, coxa 1 produced ventroanteriorly, coxa 4 unlobed, coxa 5 shorter than 4. Gnathopods 1-2 with similar segment 6 bearing oblique palm; gnathopod 1 hardly smaller than 2, with segment 5 not longer than 6, unlobed. Segment 5 of gnathopod 2 not longer than 6, distinctly lobed. Pereopods 3-4 normal. Pereopods 5-7 dissimilar, segment 2 of pereopods 5-6 narrow and unlobed, that of pereopod 7 distinctly broader and lobed. Uropods 1-2 normal, biramous, rami with lateral and distal spines; peduncle of uropod 1 with ventrofacial spine. Uropod 3 parviramus, inner ramus scale-like, outer ramus 2-segmented, second segment short. Telson short, incised $\frac{3}{4}$ of its length, lobes pointed distally. (Males unknown).

Taxa: *propagatio* (Imbach, 1967).

Remarks: Genus *Cephalopisella* belong to *Eriopisella* complex, and rather allied to the genus *Nippopisella*, but differs from all genera of this complex by produced ventroanterior part of the head.

Ecology: marine genus.

Distribution: South China Sea.

Genus MADAPISELLA Stock

Syn.: *Madapisella* Stock 1980: 384.

Eriopisella (part.) Barnard & Barnard 1983: 680.

Type - species: *Eriopisella madagascarensis* Ledoyer, 1968 (original designation).

Diagnosis: Body smooth, urosomites free. Lateral cephalic lobes of head subrounded, without ventroanterior incision. Eyes present. Antennae 1-2 normal, peduncular segments 1-2 nearly subequal long, segment 3 short, accessory flagellum 1-segmented, short. Antenna 2 flagellum longer than last peduncular segment.

Labrum entire. Labium with inner lobes. Mandible molar triturative, incisor toothed, no setae between them; palp 3-segmented, linear, nearly as long as mandible: first segment short, second and third segment unequal, segment 3 with distal setae only. Maxilla 1 inner plate with distal setae only, palp 2-segmented. Maxilla 2 inner plate with distal setae only, lateral and facial setae absent. Maxilliped normal, outer plate reaching tip of second palp segment, tapering distally (? with spines), palp 4-segmented, with nail.

Coxae 1-4 short, coxa 1 produced ventroanteriorly, coxa 4 lobed. Gnathopod 1 segments 5-6 unequal long, segment 5 unlobed, palm transverse. Gnathopod 2 segments 5-6 nearly subequal long, segment 5 unlobed, segment 6 with oblique palm (?). Pereopods 3-4 normal. Pereopods 5-7 similar, their segment 2 unlobed. Uropods 1-2 biramous, normal; peduncle of uropod 1 with long distal median spine, rami without lateral spines; distal spines of both rami in uropod 2 obtuse. Uropod 3 parviramous, inner ramus scale-like, outer ramus 2-segmented, second segment short. Telson short, incised nearly to the basis, lobes tapering distally.

Taxa: *madagascarensis* (Ledoyer, 1968).

Ecology: marine genus.

Distribution: Madagascar.

Genus NIPPOISELLA Stock

Syn. *Nippopisella* Stock 1980: 384.

Eriopisella (part.) Barnard & Barnard 1983: 679.

Type - species: *Eriopisella nagatai* Gurjanova, 1965 (original designation).

Diagnosis: Body smooth, urosomites free. Lateral cephalic lobes of head subrounded, ventroanterior sinus absent, eyes pre-

sent. Antenna 1 longer than 2, its peduncular segment 2 longer than segment 1, segment 3 short; accessory flagellum 1-segmented. Antenna 2 peduncular segment 3 slightly elongated, segments 4-5 subequal long, flagellum shorter than last peduncular segment, antennal gland cone short.

Labrum entire, subrounded. Labium with large inner lobes. Mandible molar tritulative, incisor toothed, no setae between them; palp long, 3-segmented, linear, twice longer than mandible: palp segments 1-2 subequal long, segment 3 longer than 2, segments 2-3 with lateral and distal setae. Maxilla 1 inner plate with distal setae only, palp 2-segmented. Maxilla 2 inner plate with distal setae only, lateral and facial setae absent. Maxilliped normal, outer plate (?setose), palp 4-segmented, with nail.

Coxae 1-4 short, coxa 1 produced at ventroanterior corner, coxa 4 unlobed, coxa 5 hardly shorter than 4. Gnathopod 1-2 with similar segment 6 bearing oblique palm. Gnathopod 1 hardly smaller than 2, segments 5-6 subequal long, segment 5 unlobed. Gnathopod 2 segment 5 slightly shorter than 6, strongly lobed. Pereopods 3-4 normal. Pereopods 5-7 dissimilar, segment 2 of pereopods 5-6 unlobed, that of pereopod 7 broad, lobed. Uropods 1-2 normal, biramous, rami with lateral and distal spines. Uropod 3 parviramous, inner ramus scale-like, outer ramus 2-segmented, second segment short. Telson short, incised almost to the basis, lobes tapering distally.

Sexual dimorphism present (gnathopods, uropods).

Taxa: *nagatai* (Gurjanova, 1965).

Remarks: similar to the genus *Cephalopisella* except the shape of the head.

Ecology: marine genus.

Distribution: Japan Sea.

Genus SPINIFEROPISELLA, new genus

Type - species: *Eriopisella spinosa* Ledoyer, 1979.

Diagnosis: Body smooth, urosomites free, urosomite 2 with 2 lateral spines. Lateral cephalic lobes of head subrounded, without ventroanterior notch; eyes small, present.

Antennae 1-2 normal, peduncular segment 2 of antenna 1 longer than segment 1, segment 3 short; accessory flagellum short, 3-segmented. Antenna 2 shorter than 1, peduncular segment 3 short, segments 4-5 subequal long, flagellum shorter than last peduncular segment; antennal gland cone short.

Labrum and labium probably normal (? labium with inner lobes). Mandible molar tritulative, incisor toothed, between both

a row of setae; palp feeble, 3-segmented, not longer than mandible: segment 1 short, segments 2-3 subequal, segment 3 with 1 long distal seta. Maxilla 1 inner plate conical, with distal setae only, palp 2-segmented. Maxilla 2 normal, inner plate with distal setae only, lateral and facial setae absent. Maxilliped normal (?).

Coxa 1-4 long, coxa 1 quadrate, neither tapering nor produced distally, coxa 4 longer than coxa 1, lobed. Gnathopods 1-2 dissimilar, gnathopod 1 much smaller than 2, with segment 5 longer than 6, unlobed, segment 6 with transverse palm. Gnathopod 2 segment 5 shorter than 6, unlobed, segment 6 large, with oblique palm. Pereopods 3-4 normal. Pereopods 5-7 similar to each other, their segment 2 ovoid, distinctly lobed.

Uropods 1-2 biramous, normal, rami with lateral and distal spines; peduncle of uropod 1 with 1 ventrofacial spine. Uropod 3 parviramus, inner ramus scale-like, outer ramus 2-segmented, second segment short. Telson short, incised nearly to the basis, lobes tapering distally.

Sexual dimorphism present (gnathopods, etc.).

Taxa: *spinosa* (Ledoyer, 1979).

Remarks and affinities: Genus *Tegano* J. L. Barnard & Karaman, 1982, differs from *Spiniferopisella* by excavated ventroposterior part of head, segment 2 of pereopods 5-7 unlobed, mandibular palp 2-segmented.

Genus *Maleriopa* J. L. Barnard & G. Karaman, 1982, differs by stronger, more setose mandibular palp, peduncular segment 2 of antenna 1 shorter than ped. segment 1, coxa 1 strongly tapering distally, etc.

Genus *Psammoniphargus* Ruffo 1956 differs by small, 1-segmented mandibular palp, inner plate of maxilla 2 with lateral setae (but no facial setae), segment 2 of pereopods 5-7 poorly lobed, etc.

Genus *Quadrus*, n. gen. differs by small, 1-segmented mandibular palp, unlobed coxa 4, 2-segmented accessory flagellum, inner plate of maxilla 2 with lateral setae, etc.

Genus *Eriopisella* Chevreux 1920, differs by unlobed segment 2 of pereopods 5-7, by similar segment 6 of gnathopods 1-2, lobed segment 5 of gnathopod 2, etc.

Genus *Madapisella* Stock 1980, differs by unlobed segment 2 of pereopods 5-7, coxa 1 produced anteroventrally, etc.

Genus *Nippopisella* Stock 1980, differs by stronger mandibular palp having elongated first palpar segment, produced coxa 1, unlobed coxa 4, segment 2 of pereopods 5-6 unlobed, etc.

Genus *Nainaloa* G. Karaman & J. L. Barnard 1979 is very similar to the genus *Spiniferopisella*, but differs from later by quadrate telson, partially reduced uropod 1, stronger and more setose mandibular palp, etc.

Ecology: marine, shallow water genus (intertidal).

Distribution: Moluccas islands.

DIVISION OF GENUS CHEIROCRATUS Norman, 1867

Within the genus *Cheirocratus*, Norman 1867 (type-species: *Gammarus assimilis* Liljeborg, 1851), Ledoyer (1982) established a new subgenus *Indocratus*, n. subg. with the type-species *Cheirocratus inermis* Ledoyer, 1968. But, already J. L. Barnard & Drummond (1982) revising the genus *Cheirocratus*, established a new genus *Incratella*, n. gen., with the same type-species, *Cheirocratus inermis* Ledoyer, 1968.

As *Incratella* and *Indocratus* have the same type-species, *Cheirocratus inermis* Ledoyer, 1968, they are identic, and junior of them must be removed as synonym to the senior genus. But, both, papers have been published in the same year (1982) and, at the moment, I don't have any information which one has priority, i. e. the senior name.

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141. PRILOG POZNAVANJU AMPHIPODA. *QUADRUS VAGABUNDUS*, NOVI ROD I VRSTA, I REVIZIJA RODA *ERIOPISELLA CHEVR.* (GAMMARIDEA)

Gordan S. KARAMAN

Re z i m e

U radu je opisan novi rod i vrsta morskih *Amphipoda* iz podreda *Gammaridea*, *Quadrus vagabundus*, n. gen. n. sp., koji je sakupljen u izvoru u moru pokraj obala Sri Lanke (=Cejlona) kod mjesta Jaffna na sjevernom dijelu otoka.

Novi rod *Quadrus* je dosta blizak rodu *Psammoniphargus* Ruffo 1956, sa otoka Reunion, posebno na osnovu malenog, slabo razvijenog palpusa mandibule; genus *Psammoniphargus* se ipak jasno razlikuje od roda *Quadrus* po koksi 4 sa lobusom, po odsustvu unutrašnjeg lobusa (režnja) labiuma, odsustvom očiju, prisustvom samo 6 trnova na vanjskoj grani prve maksile, itd.

Rod *Tegano* J. L. Barnard & G. Karaman, 1982. je također vrlo sličan rodu *Quadrus*, ali se jasno razlikuje od njega po dvočlanom mandibularnom palpusu, usječenim rubovima tijela, lako ispućenim bočnim glavenim pločama, dužem bočnom biću prve antene, itd.

Izvršena je revizija roda *Eriopisella* Chevreux, 1920, i postavljena su dva nova roda: rod *Cephalopisella*, n. gen. sa tipičnom vrstom *Eriopisella propagatio* Imbach, 1967, poznatom iz Južnog Kineskog Mora, i rod *Spiniferopisella*, n. gen. sa tipičnom vrstom *Eriopisella spinosa* Ledoyer, 1979, poznatom iz otočja Molukus.

Rod *Cephalopisella* se odlikuje od svih ostalih poznatih srodnih rodova po produženom ventralnom prednjem uglu glave, dok je po mnogim drugim odlikama dosta srodan sa rodnom *Nippopisella* Stock.

Rod *Spiniferopisella* se razlikuje od roda *Eriopisella* nizom karaktera (rod *Eriopisella* ima drugi segment petog, šestog i sedmog pereopoda bez lobusa, šesti segment prvog i drugog gnatopoda su međusobno vrlo slični, peti segment drugog gnatopoda je sa jasnim lobusom, itd.).

Sastavljene su nove dijagnoze rodova *Eriopisella* Chevr. 1920, *Madapisella* Stock 1980. i *Nippopisella* Stock 1980. i dat je ključ za njihovu determinaciju.

Ustanovljena je identičnost roda *Incratella* J. L. Barnard & Drummond 1982. sa podrodom *Indocratus* Ledoyer 1982, budući da oba imaju istu tipičnu vrstu, *Cheirocratus inermis* Ledoyer 1968.