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ARADIDAE IN THE BISHOP MUSEUM, HONOLULU, VI. (Hemiptera : Heteroptera)[1]

By Nicholas A. Kormilev[2]

Abstract: Author has examined additional material of Aradidae from the collections of the B. P. Bishop Museum in Honolulu, Hawaii. Thirteen new species in the subfamilies Aneurinae, Calisiinae and Carventinae are described: *Aneurus bishopi* and *A. striatus* (New Guinea), *A. taiwanensis* (Taiwan), *Aneurus* (*Aneurillus*) *gracilis* (Borneo), *Calisius hebridensis* (New Hebrides), *Camerarius indicus* (India), *C. solomonensis* (Solomon Is.), *Carventus grandis* and *C. vicinus* (New Guinea), *C. hebridensis* (New Hebrides), *C. pusillus* (New Caledonia), *C. pygmaeus* (Solomon Is.), and *Libiocoris pilicornis* (New Guinea). New records are given for: *Aradus candidatus* Bergroth, 1889 (Laos), *Lissonotocoris membranaceus* Usinger & Matsuda, 1959, (Laos), *Carventus variegatus* Kormilev, 1969 (New Guinea) and *C. robustus* Kormilev, 1966 (Solomon Is.).

Additional material of Aradidae incorporated in the collections of the Bishop Museum in Honolulu in 1971 contained 12 new species of Calisiinae, Aneurinae and Carventinae, which are described elsewhere in this paper. To these is added one new species of Carventinae from the collections of the American Museum of Natural History in New York.

Of particular interest was a specimen of a striking genus *Lissonotocoris* Usinger & Matsuda, 1959, established on the basis of a single specimen, ♀, from Tonkin, collected by Dr J. L. Gressitt in Laos.

Calisius is now recorded for the first time from New Hebrides, *Camerarius* from India, Solomon Is. and New Hebrides, and *Carventus* from New Caledonia and New Hebrides, though it was expected that these genera were present.

In this paper the length of abdomen, for convenience, was taken from the tip of the scutellum, or metanotum, to the tip of the hypopygium, or segment IX in the female respectively, excepting *Calisius* where it was taken from the fore border of connexivum I to tip of hypopygium, or segment IX. In ratios the first figure indicates the length and the second the width of measured portion; 25 units equal 1 mm.

Acknowledgment: Thanks are extended to Dr J. Linsley Gressitt, Chairman of the Department of Entomology, Bishop Museum, Honolulu, and Dr Peter Wygodzinsky, Acting Chairman of the Department of Entomology, American Museum of Natural History, New York, for their kind offices which permitted me to study the material involved in this paper.

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Subfamily ARADINAE

Genus **Aradus** Fabricius

Aradus Fabricius, 1803, Systema Rhyngotorum, p. 116.

Aradus abnormis Bergroth

Aradus abnormis Bergroth, 1889, *Ann. Mus. Civ. Stor. Nat., Genova* **27**: 730.

1 ♂, Laos, Ventiane Prov., Tha Ngone, 27.II - 6.III.1966, J. L. Gressitt coll., Malaise trap.

Aradus candidatus Bergroth

Aradus candidatus Bergroth, 1889, *Ann. Mus. Civ. Stor. Nat., Genova* **27**: 732.

1 ♂ & 5 ♀♀, Laos, Ventiane Prov., Ban Van Eue, 30.II.1965, J. L. Gressitt coll. (light trap and Malaise trap) ; 1 ♂, Laos, Ventiane Prov., Tha Ngone, 27.II-6.III.1966, J. L. Gressitt coll., (Malaise Trap) ; 5 ♀♀, Laos, Ventiane Prov., Gi Sion Vill de Tha Ngone, 28.II.1965, J. L. Gressitt coll., (light and Malaise traps).

This species was originally described from S. Burma, Tenasserim ; it is the first record from Laos.

Subfamily CALISIINAE

Genus **Calisius** Stål

Calisius Stål, 1858 (1860), *Kongl. Svenska Vet.-Akad. Handl.* **2** (7): 68.

Calisius hebridensis Kormilev, new species Fig. 1.

♀. Elongate ovate, finely granulate.

Head as long as its width across eyes (♀-13 : 13, ♂-13 : 13); anterior process obovate, rounded anteriorly and finely granulate ; lateral borders straight, slightly converging backward, densely granulate ; antenniferous tubercles short, dentiform, not reaching tip of antennal segment I ; eyes almost conical ; postocular tubercles formed by small spicules, one on each side of head, not reaching outer borders of eyes. Infraocular carinae consisting of 2 or 3 evenly spaced granules ; vertex with a double row of granules, which converge posteriorly. Antennae thin and short, almost as long as head width (12 : 13) ; relative length of antennal segments I to VI : 2.5 : 2.5 : 2.5 : 4.5 ; antennal segment II wider than I or III, IV widest ; anterior process reaching 1/2 of antennal segment III. Labium reaching hind border of labial groove, which is closed posteriorly.

Pronotum much shorter than its maximum width (♀-13 : 23, ♂-12 : 23) ; collar with 2 (1+1) granules ; lateral borders of fore lobe each with 3 spicules ; lateral borders of hind lobe with 1 spicule and 1 granule anteriorly, then without granulation ; fore disc with 2 (1+1) granules in front row, and 2 (1+1) farther spaced granules, in hind row ; hind disc with 4 (2+2) rows of granules.

Scutellum almost twice as long as its maximum width (♀-30 : 16, ♂-34 : 18) ; basal elevation with 4 (2+2) spicules on basal border and 2 (1+1) small granules between inner spicules ; lateral borders of basal elevation with a single granule in the middle ; median carina with a row of sharp granules. Lateral borders of scutellum without granulation.

Hemelytra without granulation on visible portion of corium.

Abdomen ovate, longer than its maximum width across segment IV (♀-35 : 27, ♂-35 : 26); connexivum wide, exterior borders with a double row of granules; discs of connexiva without granulation, only midlateral areas with a single, large granule at hind border of each segment. Paratergites, ♀, each consisting of 3 granules, reaching 1/2 of conical segment IX. Paratergites, ♂, reaching 1/2 of a globose hypopygium, the latter shorter than wide (5 : 8). Spiracles II to VI ventral, other lateral.

Color ochraceous; eyes, postocular borders of head, posterior half of pronotal carinae, posterior half of basal elevation of scutellum, 2 (1+1) small spots at the base of scutellar carina, 2 (1+1) streaks along middle of outer borders of scutellum, a transverse, inverted V-band on hind half of scutellum anteriorly, median spot at hind border of tergum VIII and segment IX, ♀, and hypopygium, ♂, piceous.

Total length: ♀-2.72, ♂-2.70 mm; width of pronotum: ♀-0.92, ♂-0.92 mm; width of abdomen: ♀-1.08, ♂-1.04 mm.

Holotype ♀ (BISHOP 9716), NEW HEBRIDES, Malekula I., N., 15 km NW Norsup, 28. IX.1967, J. Sedlacek coll.

Allotype ♂ (A.M.N.H.), NEW HEBRIDES, Espiritu Santo, Luganville, 7-13.I.1955, E. O. Wilson coll.

Paratype 1 ♀, New Hebrides, Malekula I., Lamap, 21.VIII.1967, J. & M. Sedlacek coll., (collection of the author).

In my key for South Pacific *Calisius* species (1967 : 456) *C. hebridensis* n. sp. runs to *C. sordidus* Kormilev, 1967, from the Solomon Is., but it is much smaller, antennal segment III is as long as II, the basal elevation of the scutellum has 4 (2+2) spicules and 2 (1+1) granules, and the color pattern is different.

Subfamily ANEURINAE

Genus **Aneurus** Curtis

Aneurus Curtis, 1825, *Brit. Ent.* **2**, pl. 86.

Aneurus sinuatipennis Bergroth

Aneurus sinuatipennis Bergroth, 1914, *Ann. Mus. Nat. Hung.* **12** : 99, 107.

1 ♂ & 3 ♀♀, Nepal, Bokaihunde, 20 km N of Trisuli (Nawakot), 13-17.XI.1965, L. V. Quate coll. (BISHOP).

Aneurus taiwanensis Kormilev, new species

♂. Elongate ovate, exterior borders of pronotum and connexivum finely crenulate.

Head as long as its width across eyes (16 : 16); anterior process strong, distinctly produced beyond tip of antennal segment I; antenniferus tubercles short, blunt; eyes semiglobose; postocular tubercles strong, blunt apically, reaching exterior border of eyes; vertex roughly transversely rugose. Antennae strong, antennal segment I obovate, II slightly tapering toward base, III and IV missing; relative length of antennal segments I to II : 4.5 : 6 : - : -. Labium short, not reaching line connecting hind borders of eyes.

Pronotum less than half as long as its maximum width (13.5 : 33); collar sinuate anteriorly; antero-lateral angles rounded and produced forward beyond collar; lateral borders finely

crenulate, subparallel, slightly convex at humeri, strongly converging, sinuate, in front of humeri; subparallel again on the fore lobe. Fore disc with 4 (2+2) callosities; transversely rugose on hind disc in front and behind of 2 (1+1) transverse, sublateral callosities.

Scutellum shorter than its basal width (15 : 24); finely carinate at base, concentrically rugose on disc.

Hemelytra reaching 1/2 of tergum VII; corium short, reaching 1/3 of scutellum; membrane white, opaque. Hind wings abbreviated, almost reaching hind border of connexivum III.

Abdomen ovate, longer than its maximum width across segment IV (68 : 46); PE-angles of connexiva not protruding; paratergites small, truncate posteriorly, reaching basal 1/3 of hypopygium; the latter pyriform, widely rounded posteriorly, slightly longer than wide (11.5 : 10.5). Spiracles II and VII lateral and visible from above; III to VI ventral, remote from border; VIII terminal.

Color: piceous; connexivum, antennae and legs, brown.

Length 4.6 mm; width of pronotum 1.32 mm; width of abdomen 1.84 mm.

Holotype ♂ (BISHOP 9717), TAIWAN, Arisan, 2130 m, 19.VIII.1947, L. & M. Gressitt coll.

Aneurus taiwanensis n. sp. is closely related to *A. hainanensis* Kormilev, 1968, from Hainan, but the abdomen is relatively narrower, the anterior process of head is distinctly produced beyond tip of antennal segment I, and the scutellum is relatively wider.

Aneurus bishopi Kormilev, new species

♀. Elongate ovate; abdomen elongate ovate; pronotum and scutellum finely punctured.

Head shorter than its width across eyes (10.5 : 12); anterior process truncate anteriorly, reaching only to 1/2 of antennal segment I; genae as long as clypeus, forming minute tips laterad of apex of clypeus. Antenniferous tubercles acute antero-exteriorly; eyes small, semiglobose; postocular tubercles strong, blunt, reaching outer border of eyes. Vertex transversely rugose. Antennae with segment I obovate, II fusiform, as long as I, other missing (4 : 4 : - : -). Labium reaching line connecting hind borders of eyes.

Pronotum less than 1/2 as long as its maximum width (11 : 23); fore lobe narrower than hind lobe (17.5 : 23); collar sinuate anteriorly; anterolateral angles rounded, produced forward as far as collar; lateral borders subparallel, slightly convex at humeri, then strongly converging and again parallel on fore lobe; hind border widely sinuate. Fore dics with 2 (1+1) large, and laterad of them with 2 (1+1) smaller callosities; hind disc finely and sparsely punctured.

Scutellum subtriangular, rounded apically, shorter than its basal width (10 : 16); disc finely, concentrically punctured.

Hemelytra reaching 2/3 of tergum VII; corium reaching 1/2 of scutellum exteriorly; membrane hyaline.

Abdomen longer than its maximum width across segment IV (51 : 33); connexivum narrow and flat; PE-angles of connexiva barely protruding; paratergites subangular, reaching as far as segment IX, which is sinuate posteriorly. Spiracles II, VI and VII lateral and visible from above; III to V ventral, placed moderately close to margin; VIII terminal.

Color: yellow brown.

Total length 3.40 mm; width of pronotum 0.92 mm; width of abdomen 1.32 mm.

Holotype ♀ (BISHOP 9718), NEW GUINEA, W, Waris, S of Hollandia, 450-500 m; 8-17. VIII.1959, T. C. Maa coll.

This species is dedicated to the Bishop Museum, Honolulu, Hawaii, whose personnel have contributed so much to our knowledge of Oriental and South Pacific insects.

Aneurus bishopi n. sp. is closely related to *A. gressitti* Kormilev, 1968, also from New Guinea, but may be separated at once by the much shorter anterior process of head, and by the ventral spiracles V which are not visible from above.

Aneurus micronesicus communis Kormilev

Aneurus micronesicus communis Kormilev, 1968, *Pacif. Ins.* **10** (2) : 257.

2 ♂♂ & 2 ♀♀, New Guinea, NE, Bulldog Rd, 2100-2800 m; 60 km S of Wau, 22-31. V.1969, J. Sedlacek coll.; 1 ♀, New Guinea, NE, Wau, Edie Creek, 1700 m; 1.I.1965, L. & M. Gressitt coll.: 1 ♂, New Guinea, SE, Murua River (S. side), 10 m; 22.XII.1964, J. Sedlacek coll.; 1 ♂, New Guinea, W, Waris S of Hollandia, 450-500 m; 1-17.VIII.1959, T. C. Maa coll.; 1 ♀, Bismark Arch., New Ireland, SW, Ridge above Camp Bishop, 15 km up Kait River, 250-500 m; 11.VI.1956, J. L. Gressitt coll.

Aneurus rugosiceps Kormilev

Aneurus rugosiceps Kormilev, 1968, *Pacif. Ins.* **10** (2) : 256.

1 ♀, New Guinea, NE, Kainantru, 2100-2240 m, 8.I.1965, J. & M. Sedlacek coll.

This specimen has antennal segment IV relativley longer than the allotype, the relative length of antennal segments being 5.5 : 5 : 5 : 14, but other characters are similar.

Aneurus striatus Kormilev, new species

♂. Elongate ovate: vertex roughly, pronotum and scutellum finely, striate.

Head as long as its width across eyes (13 : 13); anterior process conical, rounded anteriorly, reaching slightly beyond tip of antennal segment I: antenniferous tubercles acute; eyes semiglobose, protruding; postocular tubercles strong, acute, produced as far as outer borders of eyes; vertex transversely striate. Antennae slender; antennal segment I obovate, II fusiform, III subcylindrical, slightly tapering towards base, latter petiolate; IV cylindrical; relative length of antennal segments I to IV 4.5 : 4.5 : 4.5 : 10. Labium reaching line connecting hind borders of eyes.

Pronotum less than 1/2 as long as its maximum width (11 : 27); fore lobe narrower than hind lobe (20 : 27); collar sinuate; antero-lateral angles rounded and slightly produced forward beyond collar; lateral borders convex at humeri, strongly converging in middle, parallel on fore lobe. Fore disc with 4 (2+2) large callosities; hind disc very finely striate and with 2 (1+1) transverse, narrow callosities sublaterally.

Scutellum subtriangular, shorter than its basal width (13 : 18); tip angularly rounded, disc concentrically, finely rugose.

Hemelytra reaching almost to hind border of tergum VII; corium short, reaching only to 1/4 of scutellum; limit between corium and membrane rather obsolete; membrane at base very finely and densely punctured, these punctures stopping at the level of tip of scutellum, rest of membrane white, opaque.

Abdomen ovate; longer than its maximum width across segment IV (58 : 39.5); connexivum narrow; disc of connexiva II and outer borders of connexiva III to VII finely granulate; PE-

angles II to VI slightly protruding, VII rounded; paratergites small, triangular, truncate posteriorly, reachng 2/3 of hypopygium, the latter pyriform. Spiracles very small; II, VI and VII lateral and visible from above; III to V ventral, placed far from border; VIII terminal.

Color: brown; head, pronotum and scutellum, dark brown.

Total length 3.84 mm; width of pronotum 1.08 mm; width of abdomen 1.58 mm.

Holotype ♂ (BISHOP 9719), NEW GUINEA, W, Vogelkop, Sururai SW of Lake Anggi Giji, 1900 m; 27.II.1963, R. Straatman coll.

Aneurus striatus n. sp. is related to *A. subsimilis* Kormilev, 1968, but the spiracles V are ventral, and connexivum VI is barely convex posteroexteriorly.

Aneurus browni Buchanan White

Aneurus browni Buchanan White, 1876, *Ent. month. Mag.* **13**: 105.
Ctenoneurus browni: Kirkaldy, 1909, *Trans. N. Z. Inst.* **41**: 25.

2 ♂♂, 6 ♀♀ & 7 nymphs, New Zealand, S Alps, Andrew's Stream Valley, 11-13.X.1961, K. A. J. Wise coll.; 3 ♀♀, New Zealand, Rotorua, 24.VII.1923, O. H. Swezey coll.

Aneurus (Aneurillus) gracilis Kormilev, new species

♀. Elongate ovate, flat and shiny.

Head as long as its width across eyes (15.5: 15.5); anterior process conical, rounded anteriorly, not reaching tip of antennal segment I; genae much shorter than clypeus; antenniferous tubercles very short, blunt exteriorly; eyes moderately convex; postocular tubercles minute, by far not reaching outer border of eyes. Vertex with Y-form sulcus. Antennae thin and long, more than twice as long as head (37: 15.5); relative length of antennal segments I to IV: 6: 6: 9.5: 15.5; antennal segment I barrel-shaped; II widening toward tip; III subcylindrical, petiolate at base; IV cylindrical. Labium short, reaching line connecting hind borders of eyes.

Pronotum less than 1/2 as long as its maximum width (15: 34); collar sinuate anteriorly; antero-lateral angles produced forward and angularly rounded; lateral borders slightly convex, subparallel at humeri, converging and twice sinuate anteriorly; fore acetabulae and lateral ridge of propleuron visible from above.

Scutellum shorter than its basal width (15: 20), finely carinate along basal border and laterally, disc flat (crushed by pin).

Hemelytra reaching middle of tergum VII; corium reaching 1/2 of scutellum; exterior border of hemelytron angularly sinuate at the level of connexivum II; membrane pellucid.

Abdomen elongate ovate, much longer than its maximum width across segment IV (70: 43); lateral borders slightly convex; connexivum narrow, PE-angles not protruding. Paratergites small, very short, rounded posteriorly, produced backward as far as very short, small segment IX. Spiracles very small, II sublateral; III to VI ventral, placed close to margin; VII lateral and VIII terminal. Sternites III to V with a transverse sulcus along hind border.

Color: brown; labium, dorsum, tibiae and tarsi, yellow brown.

Length 4.68 mm; width of pronotum 1.36 mm; width of abdomen 1.72 mm.

Holotype ♀ (BISHOP 9720), BORNEO, N, Tenompok, 1460 m, Jesselton, 30 mi E; 26-31.I.1959, T. C. Maa coll.

Aneurus (Aneurillus) gracilis n. sp. runs in my key for *Aneurillus* species (1968: 260)

to *A.* (*A.*) *cheesmani* Kormilev, 1967, from New Hebrides, but it is larger; the antennae have different relative lengths of segments; spiracles VI are ventral, not lateral, and segment IX, ♀, is produced as far as the paratergites.

Aneurus (**Aneurillus**) **papuasicus** Kormilev

Aneurus (*Aneurillus*) *papuasicus* Kormilev, 1967, EOS, **42** (3-4) : 474.

1 ♀, New Guinea, NE, Garaina, 550-750 m, 16.I.1968, J. & M. Sedlacek coll.

Subfamily CARVENTINAE

Genus **Lissonotocoris** Usinger and Matsuda

Lissonotocoris Usinger and Matsuda, 1959, Class. Aradidae, p. 117.

Lissonotocoris membranaceus Usinger and Matsuda

Lissonotocoris membranaceus Usinger and Matsuda, 1959, Class. Aradidae, p. 118.

1 ♀, Laos, Ventiane Prov., Ban Van Eue, 13.IV.1965, J. L. Gressitt coll.

Genus **Carventus** Stål

Carventus Stål, 1865, *Hem. Africana* **3** : 32.
Acorium Signoret, 1880, *Ann. Mus. Civ. Stor. Nat., Genova* **15** : 540.
Burgeonia Schouteden, 1919, *Rev. Zool. Afr.* **6** : 134.

Carventus quatei Kormilev

Carventus quatei Kormilev, 1969. *Pacif. Ins.* **11** (1) : 65.

1 ♀, New Guinea, NW, Bodem, 100 m, 11 km SE of Oerberfaren; 10-17.VII.1959, T. C. Maa coll.

Carventus malayensis Kormilev

Carventus malayensis Kormilev, 1966, *Rev. S. Austr. Mus.* **15** (2) : 295.

1 ♂, New Guinea, NE, 650-750 m, 16.I.1968, J. Sedlacek coll.

It is a little strange that this species, originally recorded from Malay Peninsula, was now collected in NE New Guinea, but it is the same species without doubt. Mr Sedlacek, to my knowledge, never collected in Malaya, but Mr. Lea, who collected the holotype, collected also on Fiji Is. Since the latter never put the date of collecting, it is possible that his specimen was collected on Fiji and not in Malaya, which would make its record from NE New Guinea more understandable.

Carventus grandis Kormilev, new species Fig. 2.

♂. Ovate, heavily incrustated.

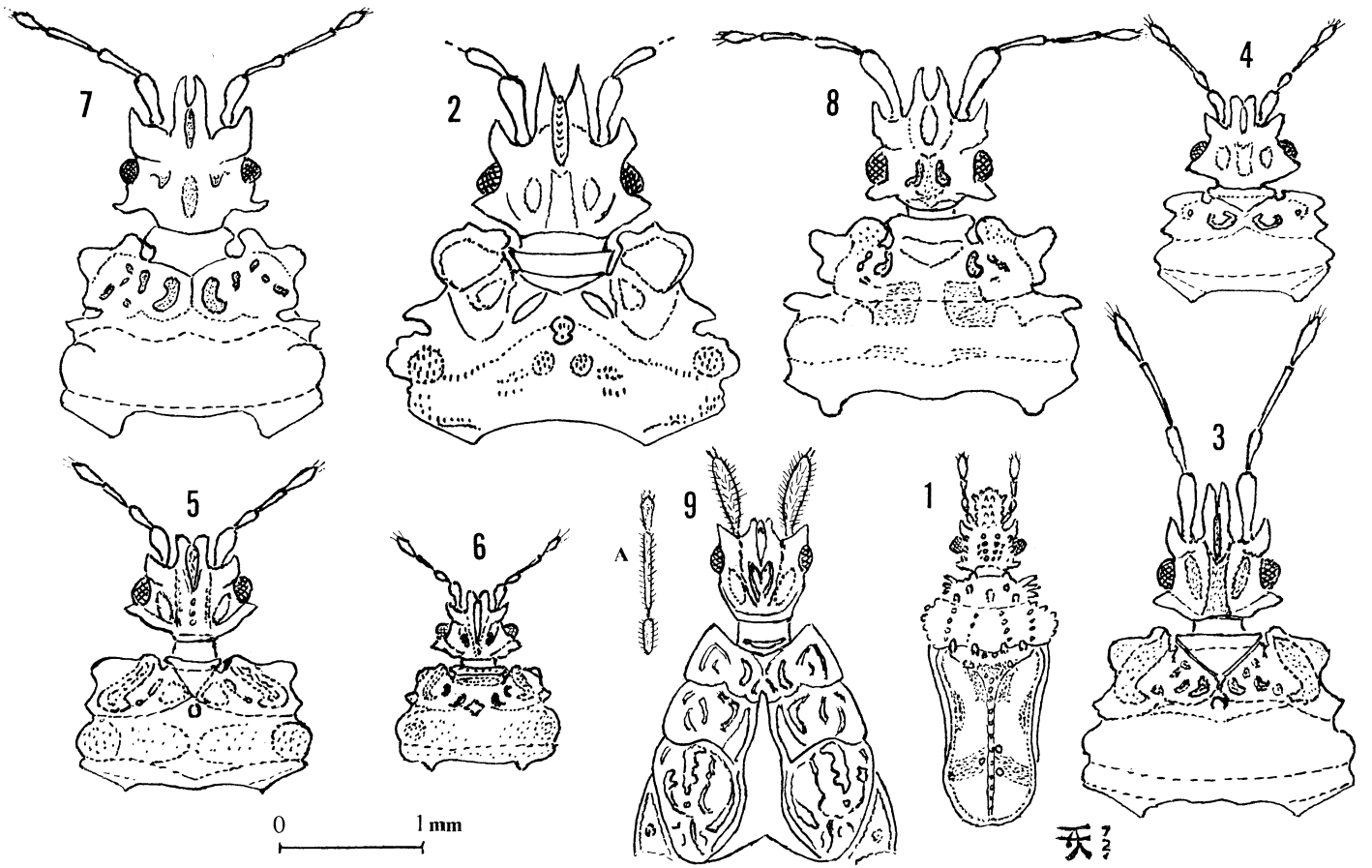

Fig. 1–9. 1, *Calisius hebridensis* n. sp., ♀, head, pronotum, scutellum, and corium; 2, *Carventus grandis* n. sp., ♂, head and pronotum; 3, *Carventus vicinus* n. sp., ♀, head and pronotum; 4, *Carventus pygmaeus* n. sp., ♂, head and pronotum; 5, *Carventus hebridensis* n. sp., ♀, head and pronotum; 6, *Carventus pusillus* n. sp., ♀, head and pronotum; 7, *Camerarius indicus* n. sp., ♀, head and pronotum; 8, *Camerarius solomonensis* n. sp., ♀, head and pronotum; 9, *Libiocoris pilicornis* n. sp., ♀, head, pro-, meso-, metanotum and terga I and II; 9 A, same, antennal segments II–IV.

Head longer than its width across eyes (30 : 28); anterior process strong, deeply cleft anteriorly and produced far beyond tips of antennal segments I; genae much longer than clypeus, spiniform and produced forward; antenniferous tubercles short, dentiform, acute, reaching 2/5 of antennal segment I. Eyes moderately large, protruding. Postocular tubercles short, blunt, directed sideways and slightly produced beyond outer borders of eyes. Vertex slightly raised medially and with 2 (1+1) ovate callosities laterad of median elevation. Antennae strong; antennal segment I clavate, II tapering toward base, III and IV missing; relative length of antennal segments I to II: 12 : 7.5 : - : -. Labium reaching hind border of labial groove, which is closed posteriorly.

Pronotum 1/2 as long as its maximum width (30 : 62); collar produced forward and separated from fore borders by 2 (1+1) deep, rounded incisures; antero-lateral angles produced forward and sideways, transversely raised on disc, carinate anteriorly and rounded. Lateral borders deeply sinuate in front and behind lateral tooth; the latter strong, produced beyond outer border of fore lobe; humeri produced sideways and rounded, then narrowed and parallel. Hind border produced backward as 2 (1+1) acute processes laterad of scutellum. Fore disc transversely carinate behind collar, flat medially, raised laterally and with usual pattern of callosities and low ridges. Hind disc separated from fore disc by a deep depression bearing a large, median tubercle. Two (1+1) tubercles placed on hind disc mesad of humeri, and 2 (1+1) more tubercles in middle of disc; all these tubercles, and partially hind disc, bearing minute, sharp granules, almost spicules.

Scutellum relatively small, triangular, shorter than its basal width (18 : 35); lateral borders slightly convex, tip angularly rounded; disc deeply punctured and with a high, narrow, twisted, granulate, median ridge.

Hemelytra almost reaching hind border of tergum VII; corium short, reaching 1/2 of scutellum, flat on disc and reflexed, rounded and directed posterio-laterally.

Abdomen ovate, longer than its maximum width across segment IV (85 : 81): connexivum wide and flat; connexiva II and III fused; exoconnexivum separated from discs by thin sulci; discs very finely granulate; PE-angles II to VI progressively protruding and rounded; PE-VII produced backward as pointed lobes, reaching beyond tips of paratergites; the latter spear-shaped, produced backward slightly beyond tip of a declivous, cordate hypopygium; the latter with a short, subtriangular ridge at base, and raised at tip. Spiracles II ventral; III to V dorso-lateral, progressively becoming lateral; VI and VII lateral, VIII dorso-lateral. Tubercles on sternum VII high and flattened on top.

Legs unarmed.

Color: red-brown, shiny, but mostly covered by grayish brown incrustation.

Total length 6.75 mm; width of pronotum 2.48 mm; width of abdomen 3.24 mm.

Holotype ♂ (BISHOP 9721), NEW GUINEA, NW, Wisselmeren, Enarotadi, 1750-1900 m; 11.VIII.1962, J. Sedlacek coll.

Carventus grandis n. sp. runs in my key for *Carventus* species (1969 : 52) to *C. denticollis* Stål, 1873, from New Guinea, but it is much larger and relatively wider; the head is longer than its width across the eyes with the anterior process produced beyond tips of antennal segment I; spiracles III to V are dorso-lateral, not dorsal.

Carventus vicinus Kormilev, new species Fig. 3.

♀. Ovate; finely granulate on head, pronotum, scutellum and connexivum; covered with thin incrustation.

Head longer than its width across eyes (25 : 22.5); anterior process deeply cleft anteriorly, reaching 5/6 of antennal segment I; antenniferous tubercles dentiform, parallel, reaching basal 1/3 of antennal segment I; eyes large, protruding; postocular tubercles dentiform, blunt, produced beyond outer borders of eyes; postero-lateral borders of head sinuate; vertex raised medially and with 2 (1+1) elongate ovate callosities. Antennae strong, relative length of antennal segments I to IV: 12.5 : 7.5 : 12.5 : 10.5. Labium reaching hind border of labial groove, which is closed posteriorly.

Pronotum shorter than its maximum width (30 : 48); fore lobe narrower than hind lobe (38 : 48). Collar separated from fore borders by 2 (1+1) deep, rounded incisions; fore borders roundly produced forward near collar, laterad of it straight and slightly receding; antero-lateral angles angularly rounded; lateral borders deeply sinuate in front and behind strong lateral tooth; humeri strongly convex. Fore disc with 2 (1+1) sulci, converging posteriorly, placed behind collar, and 2 (1+1) curved ridges sublaterally; in the middle with usual pattern of callosities. Interlobal depression deep, with a transverse ridge in it and a median tubercle on top of ridge. Hind disc transversely raised, and with a thin transverse sulcus along hind border.

Scutellum triangular, half as long as its basal width (15 : 30); lateral borders slightly convex; tip blunt, angular; disc raised at base medially, with a thin median ridge.

Hemelytra reaching 3/5 of tergum VII; corium reaching 1/2 of scutellum; exterior border of corium reflexed.

Abdomen ovate, longer than its maximum width across segment IV (80 : 73); connexivum wide, slightly raised laterally; connexiva II and III fused; PE-angles III to VI slightly protruding, PE-VII produced backward as pointed lobes, reaching as far as paratergites; the latter small, dentiform, reaching 3/4 of tricuspidate segment IX. Spiracles II ventral, III to VIII lateral and visible from above.

Legs unarmed.

Color: yellow brown, but mostly covered with grayish-white incrustation.

Total length 6.00 mm; width of pronotum 1.92 mm; width of abdomen 2.92 mm.

Holotype ♀ (BISHOP 9722), NEW GUINEA, NE Wau, 1200 m, 28.II.1970, J. Sedlacek coll.

Carventus vicinus n. sp. runs in my key for *Carventus* species (1969 : 52) to *C. speculifer* Bloete, 1965, from Celebes, but the antennae are relatively longer antennal segment VI is longer than II, the genae are much longer than the clypeus; the anterior borders of pronotum are differently shaped; roundly produced interiorly and straight, receding exteriorly.

Carventus horvathi Kormilev

Cavrentus horvathi Kormilev, 1954, *The Philipp. Jour. Sc.* **83** (2) : 123.

1 ♂, New Guinea, W, Waris S. of Hollandia, 1-18.VII.1969, T. C. Maa collector; 1 ♀, same locality, 16-23.VIII.1959, T. C. Maa coll.

Carventus stolidus Kormilev

Carventus stolidus Kormilev, 1969, *Pacif. Ins.* **11** (1) : 63.

2 ♂♂, New Guinea, W, Waris S. of Hollandia, 450-500 m; 1-17.VIII.1959, T. C. Maa coll.

Carventus biroi Kormilev

Carventus biroi Kormilev, 1954, *The Philipp. Jour. Sc.* **83** (2) : 125.

1 ♂, New Guinea, NE, Wau, Morobe Distr., 1200 m; 19.XI.1961. J. & M. Sedlacek coll.

Carventus denticollis Stål

Carventus denticollis Stål, 1873, *Enum. Hem.* 3 : 140.

1 ♀, New Guinea, W, Waris S. of Hollandia, 450-500 m, 8-17.VIII.1959. T. C. Maa coll. (Sweeping) ; 1 ♀, New Guinea, SE, Moresby, Brown R., 10 m, 16.XII.1964, J. Sedlacek coll.

Carventus gracilis Kormilev

Carventus gracilis Kormilev, 1969, *Pacif. Ins.* **11** (1) : 59.

1 ♂, New Guinea, W, Waris S. of Hollandia, 1-18.VIII.1959, T. C. Maa coll.; 1 ♂, New Guinea, NE, Upper Sepik, 1/2 way between Green and Yellow Rivers, 180 m, 5.VII.1965, R. Straatman coll.

Carventus variegatus Kormilev

Carventus variegatus Kormilev, 1969, *Pacif. Ins.* **11** (1) : 64.

1 ♂, New Guinea, W, Waris S. of Hollandia, 450-500 m, 1-17.VIII.1959, T. C. Maa coll.

The holotype, ♀, was recorded from New Britain, Bismark Archipelago. The male, now newly recorded from West New Guinea, was not made an allotype, though I believe it to be this species.

Its measurements are : head 15 : 17.5, relative length of antennal segments I to IV : 7 : 5 : - : - (two segments are missing) ; pronotum 21 : 33, fore lobe narrower than hind lobe 27.5 :33 ; scutellum 12 : 71 ; abdomen 55 : 42 across segment IV or V ; hypopygium 10 : 8.

Total length 4.04 mm ; width of pronotum 1.32 mm ; width of abdomen 1.68 mm.

Carventus pygmaeus Kormilev, new species Fig. 4.

♂. Elongate ovate, covered with yellowish incrustation.

Head shorter than its width across eyes (15.5: 18) ; anterior process with subparallel sides, cleft anteriorly, reaching 3/4 of antennal segment I ; antenniferous tubercles dentiform, blunt, strongly divaricating, reaching 1/2 of antennal segment I. Eyes protruding. Postocular tubercles produced beyond outer border of eyes. Vertex slightly raised medially, and with 2 (1+1) ovate callosities laterad of elevation. Antennae longer than head's width across eyes (23.5 : 18) ; relative length of antennal segments I to IV : 7 : 4.5 : 6 : 6. Labium produced beyond line connecting hind borders of eyes.

Pronotum shorter than its maximum width (17.5 : 31) ; fore lobe narrower than hind lobe (27.5 : 31) ; collar produced laterally and separated from fore borders by deep and rounded incisions ; fore borders produced inward, touching collar, and slightly receding exteriorly ;

antero-lateral angles rounded and produced outward; lateral borders deeply sinuate in front and behind strong lateral tooth; humeri convex. Fore disc rather flat; lateral ridges slightly raised; interlobal depression shallow; hind disc slightly convex; interlobal depression without granula or ridge in middle.

Scutellum shorter than its basal width (12: 17); disc with a T-shaped median ridge; lateral borders convex, rounded, tip also rounded.

Hemelytra reaching 1/2 of tergum VII; corium reaching 1/2 of scutellum; baso-lateral borders of corium carinate and strongly convex.

Abdomen ovate, longer than its maximum width across segment IV (51: 42.5); connexivum wide and flat; exterior borders rough, discs finely granulate exteriorly; PE-angles II to VI barely protruding, PE-VII rounded, reaching 1/2 of paratergites; the latter clavate, almost reaching tip of hypopygium; hypopygium small, slightly shorter than its maximum width (7: 8), rounded posteriorly with a stout median ridge reaching 2/3 of disc length. Spiracles II to VII lateral and visible from above, VIII terminal. Tubercles of tergum VII large, flat, placed far from border.

Legs unarmed.

Color: yellow brown partially darker; incrustation yellowish.

Total length 3.84 mm; width of pronotum 1.24 mm; width of abdomen 1.70 mm.

Holotype ♂ (BISHOP 9723), SOLOMON Is., Bougainville, S, 1.VI.1956, J. L. Gressitt coll.

Paratype 1 ♂, collected with holotype, (collection of author).

Carventus pygmaeus n. sp. is related to *C. variegatus* Kormilev, 1969, from New Britain, Bismark Arch., but may be separated at once by the lateral and dorsally visible spiracle II, and by the relatively smaller and shorter hypopygium, shorter than its width.

Carventus robustus Kormilev

Carventus robustus Kormilev, 1966, *Rec. S. Austr. Mus.* **15** (2): 298.

1 ♀, Solomon Is., Wainoni, W. M. Mann coll., (A. M. N. H).

This species was originally recorded from Fiji.

Carventus minusculus Kormilev

Carventus minusculus Kormilev, 1969, *Pacif. Ins.* **11** (1): 61.

1 ♀, Fiji, Viti Levu, Nadi Airport, 6.XII.1958, C. R. Joyce coll.; 1 ♀, Fiji, Moala, 12. VII.1924, E. H. Bryan coll.; 1 ♀, New Hobrides, Efate Vila, 100 m; II.1970, N. L. H. Krauss coll.

Carventus hebridensis Kormilev, new species Fig. 5.

♀ : head, pronotum, scutellum and connexivum, partially granulate.

Closely related to *C. quatei* Kormilev, 1969, from Philippines, but smaller; pronotum relatively shorter and fore lobe wider, scutellum and abdomen relatively shorter; PE-angles II to VI not protruding, PE-VII rounded, not so angular.

Other characters similar in both species.

Measurements: head 17 : 20.5; relative length of antennal segments I to IV: 7.5 : 5 : 6 : 7.5; pronotum 22 : 41, fore lobe narrower than hind lobe 34 : 41; scutellum 11 : 23; abdomen 57 : 53 across segment IV.

Color: red-brown, partially covered with whitish incrustation; vertex, callosities on the hind lobe of pronotum, tip of scutellum, corium in the middle, and tergum VII medially, piceous.

Holotype ♀ (BISHOP 9724), NEW HEBRIDES, Vila, Efate, VIII.1950, N. L. H. Krauss coll.

Carventus pusillus Kormilev, new species Fig. 6.

♀. Elongate ovate; head, pronotum, corium, scutellum and connexivum, finely granulate.

Head shorter than its width across eyes (13 : 15); anterior process with parallel sides, incised anteriorly, reaching 3/5 of antennal segment I; antenniferous tubercles dentiform, strongly diverging, reaching basal 1/3 of antennal segment I; eyes protruding; postocular tubercles blunt, slightly produced beyond outer border of eyes; clypeus strongly raised; vertex narrowly raised medially, with 2 (1+1) converging carinae laterad of median elevation; infraocular callosities small, ovate, deeply depressed posteriorly. Antennae thin; relative length of antennal segments I to IV: 5.5 : 3 : 5 : 5. Labium produced far beyond line connecting hind borders of eyes; labial groove closed posteriorly.

Pronotum shorter than its maximum width (17 : 29); fore lobe narrower than hind lobe (22.5 : 29); collar straight anteriorly, granulate, separated from fore borders by deep, narrow incisures; fore borders slightly sinuate; antero-lateral angles rounded, neither produced forward, nor sideways; lateral tooth small, but produced beyond lateral border of fore lobe; humeri convex, rounded. Fore disc with a transverse, granulate ridge behind collar; 2 (1+1) curved ridges placed sublaterally, and between them the usual pattern of callosities. Interlobal depression deep, with a median, round tubercle in middle. Hind disc densely granulate and with a thin, but deep, transverse sulcus along hind border.

Scutellum semicircular, granulate at base medially in the shape of a triangle; median carina and lateral borders with erect, sharp granules; between triangular, granulate area and lateral borders are placed 2 (1+1) elongate depressions, without granules.

Hemelytra reaching 2/3 of tergum VII; corium reaching 2/3 of scutellum; baso-lateral borders of corium reflexed and granulate, veins raised and granulate.

Abdomen ovate, longer than its maximum width across segment IV (42 : 38); connexivum wide, slightly raised laterally and finely granulate; PE-angles III to VI not protruding, PE-VII rounded; disc of connexiva II carinate along interior border; tergum VII raised behind tips of hemelytra and deeply, transversely depressed along hind border. Paratergites large, rounded posteriorly, reaching 2/3 of a deeply incised posteriorly segment IX. Spiracles II to V ventral, placed very far from borders, VI to VIII lateral and visible from above.

Legs unarmed.

Color: brown but mostly concealed by grayish-yellow incrustation; head, hind border of pronotum medially, corium, tergum VII posteriorly, are piceous; membrane brown, with piceous streak exteriorly.

Total length 3.40 mm; width of pronotum 1.16 mm; width of abdomen 1.52 mm.

Holotype ♀ (BISHOP 9725), NEW CALEDONIA, Col de Roussettes, 450–550 m; 4–6. II.1963, G. Kuschel coll.

Carventus pusillus n. sp. is related to *C. elongatus* Kormilev, 1965, from Australia, but may be separated from it by the lateral spiracle VI, not ventral.

Carventus australis Kormilev

Carventus australis Kormilev, 1958, *Jour. N. Y. Ent. Soc.* **66**: 87.

1 ♀, Australia, Queensland, Atherton Tab. 2300 feet, 12.IV.1932, Harvard Exp., Darlington (A. M. N. H.).

Genus **Camerarius** Distant

Camerarius Distant, 1902, *Ann. Mag. Nat. Hist.* (7) **9**: 359.
Carventus Usinger and Matsuda, 1959, Class. Aradidae, p. 120.
Camerarius Kormilev, 1969, *Pacif. Ins.* **11** (1): 49.

Camerarius indicus Kormilev, new species Fig. 7.

♀. Elongate ovate, tapering forward; heavily incrustated.

Head as long as its width across eyes (25: 24.5); anterior process with parallel sides, deeply cleft anteriorly, genae being much longer than clypeus, almost reaching tip of antennal segment I; antenniferous tubercles dentiform, parallel, acute, reaching 1/2 of antennal segment I. Eyes protruding; postocular tubercles dentiform, distant from eyes and directed sideways, produced beyond outer border of eyes. Vertex raised medially, flanked by 2 (1+1) ovate, depressed callosities. Antennae thin, longer than head (34: 25); relative length of antennal segments I to IV: 10:7.5:10.5:6. Labium reaching slightly beyond line connectind hind borders of eyes; labial groove deep, closed posteriorly.

Pronotum shorter than its maximum width (32: 46); fore lobe narrower than hind lobe (40: 46); collar sinuate in front, separated laterally from fore borders by 2 (1+1) deep, rounded incisures; anterior angles dentiform, blunt, produced forward almost as far as collar; fore borders deeply sinuate; antero-lateral angles produced obliquely forward as rounded lobes; lateral borders in front of lateral tooth deeply, and behind it shallowly incised; humeri rounded and raised, lateral borders behind them narrowly sinuate. Fore disc with a transverse ridge just behind collar, and with a median sulcus behind the ridge; laterad of median sulcus with usual pattern of callosities. Interlobal depression deep, with median tubercle and 2 (1+1) sublateral, short ridges. Hind disc sparsely granulate, and with a transverse sulcus along hind border.

Scutellum small, shorter than its basal width (14: 25); finely carinate sublaterally; thin median carina granulate; lateral borders straight, tip acute.

Hemelytra reaching over fore border of tergum VII; corium reaching basal 1/3 of scutellum; baso-lateral borders of corium straight, diverging and reflexed.

Abdomen longer than its maximum width across segment V (95: 75); connexivum wide, slightly raised laterally; connexiva II and III fused; PE-angles III to V not protruding; PE-VI slightly protruding; PE-VII forming slightly blunt angles and rounded, not produced beyond hind border of tergum VII. Paratergites strong, dentiform, reaching 1/2 of a tricuspidate segment IX. Spiracles II to IV ventro-lateral, but not visible from above; V to VIII lateral or dorso-lateral.

Legs unarmed,

Color: yellow brown, but mostly covered with yellowish incrustation; central dorsal plate yellow brown, smooth and shiny.

Total length 6.72 mm; width of pronotum 1.84 mm; width of abdomen 3.00 mm.

Holotype ♀ (A. M. N. H.), INDIA, S. Nilgiri Hills, 3200', P. Susai Nathan coll.

Camerarius indicus n. sp. runs in my key for *Camerarius* species (1969 : 66) to *C. milleri* (Kormilev), 1967, from which it may be separated by the head as long as its width across eyes, anterior process of head almost reaching tips of antennal segments I, and by the much shorter antennae, less than 1 1/2 × as long as head.

Camerarius pallescens (Walker)

Crimia pallescens Walker, 1873, *Cat. Hem. Het. Brit. Mus.* **7**: 20.
Camerarius pallescens: Distant, 1902, *Ann. Mag. Nat. Hist.* (7) **9**: 358.
Carventus pallescens: Usinger and Matsuda, 1959, Class. Aradidae, p. 121.
Camerarius pallescens: Kormilev, 1969, *Pacif. Ins.* **11** (1): 67.

1 ♂, New Guinea, NE, Upper Sepik, Wagu, 180 m, 5.VII.1963, R. Straatman coll.

Camerarius stali (Bergroth)

Carventus stali Bergroth, 1889, *Ann. Soc. Ent. Belge* **33**: 181.
Camerarius wappersi Komilev, 1954, *The Philipp. Jour. Sc.* **83** (2): 128.
Camerarius stali: Kormilev, 1969, *Pacif. Ins.* **11** (1): 67.

1 ♀, New Guinea, NE, Green R./Sepik R. Junction, 110 m; 24.VI.1963, R. Straatman coll.; 1 ♀, New Guinea, NE, May R., 6.VI.1963, R. Straatman coll.; 1 ♂, New Guinea, NW, Bodem, SE of Oerberfaren, 100 m, 10-17.VII.1959, T. C. Maa coll.

Camerarius solomonensis Kormilev, new species Fig. 8.

♀. Ovate, sturdy; covered with scarse, short, stiff, bristles, particularly on the antennal segments I, and with grayish brown incrustation.

Head longer than its width across eyes (25 : 22); anterior process strong, with genae spiniform, curved inwards, produced far beyond tip of clypeus, reaching 3/4 of antennal segment I; antenniferous tubercles dentiform, acute, slightly diverging and curved inward, reaching 2/5 of antennal segment I. Eyes large, protruding. Postocular tubercles short, blunt, produced as far as outer borders of eyes; vertex raised medially, with 2(1+1) ovate callosities mesad of eyes. Antennae thin, with exception of antennal segment I; relative length of antennal segments I to IV: 13 : 8.5 : 10.5 : 7. Labium short, reaching hind border of labial groove, which is closed posteriorly.

Pronotum shorter than its maximum width (33 : 52.5); fore lobe narrower than hind lobe (42.5 : 52.5); collar robust, protruding forward, and separated from fore borders by 2 (1+1) deep incisures; anterior angles dentiform, produced forwad almost as far as collar; anterolateral angles dentiform, blunt, produced sideways, behind them lateral borders of fore lobe bear a tooth; interlobal tooth strong; humeri convex; lateral borders in front and behind lateral tooth sinuate; hind border convex medially, with 2 (1+1) short teeth laterad of scutellum. Fore disc with a short, transverse ridge behind collar, and with usual pattern of callosities; 2 (1+1) large, square callosities placed at hind border of fore lobe, and 2 (1+1) corresponding callosities are placed at fore border of hind lobe. Hind disc granulate around callosities.

Scutellum triangular, shorter than its basal width (17 : 28); disc flat and punctured.

Hemelytra reaching hind border of tergum VI; corium reaching basal 1/3 of scutellum; exterior borders of corium carinate and diverging, disc with short, oblique ridges.

Abdomen ovate, slightly longer than its maximum width across segment IV (83 : 79); connexivum wide and slightly reflexed exteriorly; segments II and III fused; exterior borders of connexiva slightly convex; PE-angles III to VI rounded, PE-VII rounded, produced backward reaching 1/2 of paratergites; discs of connexiva III to VII each with 2 round, callous spots; midlateral areas also with a large, round spot on each segment. Tergum VII flat, glabrous in the middle anteriorly. Paratergites dentiform, acute, reaching tip of a tricuspidate segment IX. Spiracles II ventral, placed close to margin; III to VIII lateral and visible from above.

Legs unarmed.

Color: yellow-brown, but mostly concealed under grayish brown incrustation.

Total length 6.32 mm; width of pronotum 2.10 mm; width of abdomen 3.16 mm.

Holotype ♀ (BISHOP 9726), SOLOMON Is., Malaita, Nuna, 25 km SE of Dala; 200 m: 16.VII.1964, J. Sedlacek coll.

Camerarius solomonensis n. sp. runs in my key for *Camerarius* species (1969: 66) to *C. stali* (Bergroth), 1889, but it is much more sturdy, the processes on the fore lobe of pronotum are much shorter; the exterior borders of the connexiva are not granulate; the paratergites and segment IX are also relatively shorter, and the incrustation is grayish brown, not white.

Camerarius intermediarius Kormilev

Camerarius intermediarius Kormilev, 1969, *Pacif. Ins.* **11** (1): 68.

1 ♂, 1 ♀, Solomon Is., Ugi, W. M. Mann coll. (A. M. N. H.); 1 ♀, Solomon Is., Wainoni, W. M. Mann coll. (A. M. N. H.).

Camerarius aberrans Kormilev

Camerarius aberrans Kormilev, 1969, *Pacif. Ins.* **11** (1): 69.

1 ♀, Solomon Is., Bougenville, Boku; 4-6.VI.1956, J. L. Gressitt coll.

Genus **Libiocoris** Kormilev

Libiocoris Kormilev, 1957, *The Philipp. Jour. Sc.* **85** (3): 390.

Libiocoris antennatus Usinger and Matsuda

Libiocoris antennatus Usinger and Matsuda, 1959, Class. Aradidae, p. 181.

1 ♀, New Guinea, NE, Garaina, 800 m; 16.I.1968, J. & M. Sedlacek coll.

Libiocoris pilicornis Kormilev, new species Fig. 9 & 9 A.

♀. Elongate ovate, tapering forward from middle of abdomen; covered with gray brown incrustation; body naked, antennae and legs with short, erect bristles. Apterous.

Head as long as its width across eyes (17 : 17.5); anterior process strong, but short, with parallel sides, tricuspidate anteriorly, genae being as long as clypeus, the latter raised in middle, reaching 1/4 of antennal segment I; antenniferous tubercles dentiform, acute, divaricating,

reaching 1/2 of anterior process; eyes small, deeply inserted in head, convex exteriorly; postocular borders convex and converging backward; vertex with 2 (1+1) longitudinal carinae and laterad of them with 2 (1+1) V-shaped callosities. Antennae long, more than twice as long as head (47: 17); antennal segment I stout, clavate, II and III cylindrical, IV fusiform; relative length of antennal segments I to IV: 17.5:6.5; 15.5:7.5. Labium slightly produced beyond line connecting hind borders of eyes.

Pronotum less than half as long on median line as its maximum width (12.5: 29); antero-lateral angles produced forward beyond collar and rounded; lateral borders straight, diverging posteriorly; hind border subangularly produced posteriorly; disc flat, carinate medially, carina tapering forward and evenescent anteriorly; pro-, meso-, and metanota laterad of median plate separated by deep sulci; disc of pronotum laterad of median carina with 8 (4+4) curved callosities, separated by low carinae. Median carina of pronotum produced backward across meso-, metanota and terga I and II, as a flat, elongate, triangular, median plate, widening posteriorly and reaching central dorsal plate of abdomen. Mesonotum laterad of median plate with a pattern of callosities and low carinae similar to that of pronotum; lateral borders of mesonotum straight and diverging posteriorly. Metanotum divided by median plate into 2 (1+1) large plates, fused posteriorly with terga I and II. Hind borders of mesonotum laterad of median plate are sinuate. Both plates of metanotum and terga I and II, laterad of median plate, have a similar pattern of callosities and low ridges.

Abdomen longer than its maximum width across segment V (57: 53), in this case the length of abdomen was taken from fore border of tergum III (central dorsal plate) to tip of segment IX, as terga I and II are completely fused with metanotum, and separated from central dorsal plate and connexiva II by deep sulci. Central dorsal plate subrectangular, consisting of terga III to VI, its fore border convex medially, lateral borders slightly convex, and hind border straight; disc slightly convex, raised medially, with usual pattern of 4 (2+2) rows of callosities, surrounded by low carinae. Scars of scent glands clearly visible between terga IV and V, and between VI and VII. Connexivum wide and sloping laterally; connexiva II and III completely fused, others separated by fine sulci. PE-angles not protruding, but exterior borders of connexiva V slightly, angularly convex, VI more angularly convex; PE-VII forming almost right angles. Tergum VII slightly raised in the middle posteriorly. Paratergites rounded, diverging, reaching basal 1/3 of segment IX, which is truncate posteriorly. Spiracles II to VII lateral and visible from above, VIII terminal.

Legs unarmed.

Color: reddish brown but consealed under grayish brown incrustation.

Total length 4.56 mm; width of pronotum 1.16 mm; width of abdomen 2.12 mm.

Holotype ♀ (BISHOP 9727): NEW GUINEA, W, Star Mts, Sibil Val., 1245 m; 18.X-8.XI.1961, S. Quate and L. Quate coll. (Berlese funnel).

1 ♂, New Guinea, NW, Wisselmeren, Enarotadi, 1850-1900 m, 4.VIII.1962, J. & M. Sedlacek coll. was not made an allotype, because the pilosity on antennae and legs is shorter, but this specimen is not well preserved, so that it is possible that the pilosity was abraded.

Measurements: head 16: 16, relative length of antennal segments I to IV: 15: 5.5: 15: 7; pronotum 10.5:25, abdomen 48:44 across segment IV, hypopygium 14: 10.

Total length 3.68 mm; width of pronotum 1.04 mm; width of abdomen 1.76 mm.

Libiocoris pilicornis n. sp. is related to *L. antennatus* Usinger and Matsuda, 1959, but is smaller, the genae are shorter, as long as the clypeus; the median plates of the pro-, meso-, metanota and tergites I and II are wider and lack carinae, even on the mesonotum;

the relative length of the antennal segments are different.

Genus **Eurycoris** Kormilev

Eurycoris Kormilev, 1957, *The Philipp. Jour. Sc.* **85** (3): 393.

Eurycoris piliferus Usinger and Matsuda

Eurycoris piliferus Usinger and Matsuda, 1959, Class. Aradidae, p. 187.

1 ♂, New Guinea, NE, Mt. Kaindi, 2350 m; 10.I.1969, J. Sedlacek coll.

Eurycoris squalidus Kormilev

Eurycoris squalidus Kormilev, 1968, *Pacif. Ins.* **10** (3-4): 595.

1 ♂, New Guinea, NE, Wau, Mt. Missim, 950-1300 m; 8-9.I.1966, J. & M. Sedlacek coll.

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1969. Aradidae in the Bishop Museum, Honolulu IV, (Hemiptera-Heteroptepa). *Pacif. Ins.* **11** (1): 49-70, 35 figs,