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On some Aradidae (Hemiptera: Heteroptera) from Nepal and Thailand

by

Nicholas A. KORMILEV and Ernst HEISS*)

Über einige Aradidae (Hemiptera: Heteroptera) von Nepal und Thailand

Zusammenfassung:

Die Heteropterenfauna Nepals ist noch sehr mangelhaft erforscht, insbesondere deren biogeographische Zusammenhänge. So überrascht es nicht, daß eine kleine Ausbeute von Aradiden, welche Herr Prof. Dr. H. Franz, Wien, von seinen Forschungsreisen mitbrachte, fünf neue Arten enthielt. Diese sind *Daulocoris nepalensis*, n. sp.; *Mezira (Mezira) nepalensis*, n. sp.; *Mezira (M.) himalayensis*, n. sp.; *Mezira (M.) nuda*, n. sp. und *Neuroctenus franzi*, n. sp.

Während ein Großteil der orientalischen Vertreter der Gattung *Mezira* der Untergattung *Zemira* KORM. 1971 angehören, sind die neuen Arten aus Nepal in die Untergattung *Mezira* s. str. zu stellen, welche hauptsächlich die Arten Kontinentalasiens und der Palaearktis umfaßt.

Ein Bestimmungsschlüssel für die orientalischen Arten des Subgenus *Mezira* A. S., s. str., 1843, wurde erarbeitet. Dabei konnte die Zugehörigkeit von *Mezira (Zemira) gigantea* KORMILEV, 1955, zur Gattung *Chrysodaspis* KORMILEV, 1971, festgestellt werden.

Synopsis: The following new taxa are proposed: *Daulocoris nepalensis*, n. sp.; *Mezira (Mezira) nepalensis*, n. sp.; *Mezira (M.) himalayensis*, n. sp., *Mezira (M.) nuda*, n. sp. and *Neuroctenus franzi*, n. sp., all from Nepal. *Mezira (Zemira) gigantea* KORMILEV, 1955, from Borneo was transferred to the genus *Chrysodaspis* KORMILEV, 1971. A key for the species of the genus *Mezira* A. S., s. str., 1843, is given.

By the kind offices of Prof. Dr. Herbert Franz, Wien, we have received a small lot of Aradidae collected in Nepal and Thailand, for what we express him our gratitude. From 11 species, represented in this lot, 5 are new and are described else where in this paper. All new species are from Nepal. We are also indebted to Dr. A. Sóos, Hungarian National Museum, Budapest, for sending the type of *Mezira gigantea* KORMILEV, 1955, what

*) Addresses of the authors:
Nicholas A. Kormilev, Ing. Agr., Research Associate in Entomology at the Bishop Museum, Honolulu, Hawaii, and Los Angeles Country Museum of Natural History, Los Angeles, California; 102-34 93rd Avenue, Richmond Hill, New York 11418, USA.
Dipl.-Ing. Ernst Heiss, A-6020 Innsbruck, Josef-Schraffl-Straße 2a, Austria.

abled us to transfer it to the genus *Chrysodaspis* KORMILEV, 1971. We extend our thanks to Dr. W. Schedl, Inst. of Zoology, University of Innsbruck, for the possibility to execute the drawings in the institute and to Dr. W. R. Dolling, British Museum (N. H.), London, for checking *Mezira tenuicornis* DISTANT, if it really belongs to the genus *Mezira* and not to *Arictus*, as the drawing by DISTANT could be referred to both genera and description is not clear enough.

Of particular interest was *Mezira (M.) nuda*, n. sp. with its rugose head and fore-disc of pronotum and almost complete absens of pubescens.

Measurements were taken with micromillimeter eyepiece, 25 units = 1 mm. In ratios, the first figure represents the length and the second the width of measured portion. For convenience, the length of abdomen was taken from the tip of scutellum to the tip of hypopygium (♂), or segment IX (♀), respectively.

Genus Mezira AMYOT and SERVILLE, 1843
Subgenus Mezira A. S., sensu strictu

In the Oriental Region, most of the species of the genus *Mezira* A. S., 1843, belong to the subgenus *Zemira* KORMILEV, 1971. Less numerous species of the subgenus *Mezira* A. S., sensu strictu, are mostly recorded from the continental Asia.

Key to the Oriental species of the genus *Mezira* A. S., s. str.

1. Brachypterous . . . . . 2.
– Macropterous . . . . . 3.

2. Smaller, less than 6.0 mm; anterior process of head almost reaching tip of antennal segment I; not pilose (Ceram) . . . . . *roberti* KORMILEV, 1971
– Larger, over 9.0 mm; anterior process reaching 3/5 of antennal segment I; body with stif, erect bristels. (China) . . . . . *sinensis* KORMILEV, 1971.

3. Body covered with stif, erect bristles; size over 11.0 mm. (Viet Nam) . . . . . *piligera* KORMILEV, 1971.
– Body at most covered with short, curled or straight, hairs; size less than 10.0 mm 4.

4. Connexivum concolor . . . . . 5.
– Connexivum bicolor . . . . . 9.

5. Lateral borders of connexiva sinuate and convex posteriorly, abdomen looks undulate. (India) . . . . . *undulata* (BERGROTH, 1892).
– Lateral borders of abdomen not undulate . . . . . 6.

6. Anterior process of head produced beyond tip of antennal segment I; postocular tubercles produced far beyond outer borders of eyes. (Java) . . . . . *lieftincki* KIRITSHENKO, 1959.
– Anterior process of head at most reaching tip of antennal segment I; postocular tubercles at most reaching outer borders of eyes . . . . . 7.

7. Anterior process of head reaching tip of antennal segment I; labium slightly passing base of head; (India) . . . . . *tenuicornis* DISTANT, 1909.
– Anterior process of head not reaching tip of antennal segment I; . . . . . 8.

8. Postocular tubercles reaching outer borders of eyes; anterior angles of pronotum only reaching fore border of collar. (China). . . . . *plana* HSIAO, 1964.
– Postocular tubercles minute, not reaching outer borders of eyes; anterolateral angles of pronotum produced beyond fore border of collar; head and fore disc of pronotum rugose. (Nepal). . . . . *nuda* n. sp.

9. Anterior process of head distinctly produced beyond tip of antennal segment I; collar thick, thicker than antennal segment II at base; antero-lateral angles of pronotum not expanded, receeding and not reaching fore border of collar; anterior disc of pronotum raised. . . . . 10.
– Anterior process of head at most slightly produced beyond tip of antennal segment I; collar thin, thinner than antennal segment II at base; antero-lateral angles of pronotum expanded, or at least forming an obtuse angle, not receeding; anterior disc of pronotum with 4 (2+2) ridges and not raised . . . . . 11.

10. Smaller, ♀-7.2 mm; antennae short, first 3 antennal segments together are shorter than pronotum. (China). . . . . *pygmaea* HSIAO, 1964.
– Larger, ♀-8.0 mm; antennae relatively longer, first 3 antennal segments together are longer than pronotum. (China). . . . . *simulans* HSIAO, 1964.

11. Anterior process of head only slightly produced beyond or reaching tip of antennal segment I; labium short, at most reaching hind border of head. . . . . 12.
– Anterior process of head distinctly shorter than tip of antennal segment I; labium long, produced beyond hind border of head. . . . . 14.

12. Antero-lateral angles of pronotum expanded, rounded and produced forward and sideways. . . . . 13.
– Antero-lateral angles of pronotum forming an obtuse angle, neither produced forward, nor sideways. (China). . . . . *yunnana* HSIAO, 1964.

13. Anterior process of head slightly produced beyond tip of antennal segment I; postocular tubercles only reaching outer borders of eyes; antennal segment I shorter than II (7:8). (Viet Nam). *luteo-maculata* KORMILEV, 1957.
– Anterior process of head only reaching tip of antennal segment I, rarely slightly produced beyond it; postocular tubercles produced beyond outer borders of eyes; antennal segment I longer than II (10:9). (Ceylon). . . . . *lateralis* (WALKER, 1873).

14. Antennal segment I subequal in length to II. (Burma). . . . . *montana* (BERGROTH, 1889).
– Antennal segment I distinctly longer than II (18:13, or 15:10). . . . . 15.

15. Larger, ♂-8.4 mm; antennae relatively longer, 1.94 x as long as width of head across eyes; antero-lateral angles of pronotum expanded and evenly rounded, produced forward and sideways; paratergites (♂) longer than hypopygium. (Nepal). . . . . *nepalensis* n. sp.
– Smaller, ♂-7.2 mm; antennae relatively shorter, only 1.83 x as long as width of head across eyes; antero-lateral angles of pronotum less expanded and more produced forward; paratergites (♂) shorter than hypopygium. (Nepal). . . . . *himalayensis* n. sp.

Mezira (Mezira) lateralis (WALKER), 1873

Crimia lateralis WALKER, 1873, Cat. Hem. Het. Brit. Mus.; **7**: 14.
Neuroctenus lateralis DISTANT, 1902, Ann. Mag. Nat. Hist.; Ser. 7, **9**: 361.
Mezira (Mezira) lateralis KORMILEV, 1971, Pacif. Ins. Mon.; **26**: 29.

DISTRIBUTION: Ceylon, Viet Nam.

6 ♂♂, 2 ♀, THAILAND, Sakaerat Exp. Stat. under rotten bark, 14.–16. VIII 70, Franz coll.; 3 ♂♂, NEPAL, Phulchoki near Kathmandu, H. Franz coll.

Mezira (Mezira) nuda, new species
Fig. 1–7, Foto 1

M a l e: Elongate ovate; head, fore disc of pronotum and scutellum, irregularly rugose; hind disc of pronotum, connexivum and tergum VII, densely granulate. Pubescens is absent, with exception of upper half of antennal segment IV.

HEAD shorter than is width across eyes (♂-26:30, ♀-28:32); anterior process short, constricted at base, dilated and tricuspidate anteriorly, clypeus being as long as genae, reaching slightly over 1/2 antennal segment I. Antenniferous tubercles short, blunt, divaricating. Eyes semiglobose, protruding. Postocular tubercles minute, acute, not reaching outer border of eyes. Vertex rugose; infraocular carinae low anteriorly, higher posteriorly; infraocular callosities long and narrow. Antennae strong, 1.85 x or less as long as width of head across eyes (♂-55.5:30, ♀-58:32); relative length of antennal segments I to IV are: ♂-15:10:17.5:13, ♀-15:10:19:14. Labium reaching hind border of labial groove.

PRONOTUM less than 1/2 as long as its maximum width (♂-29:67, ♀-31:70); fore lobe narrower than hind lobe (♂-55:67, ♀-60:70). Collar thin and sinuate anteriorly; antero-lateral angles rounded and slightly produced beyond collar. Lateral borders parallel at humeri, strongly converging in an almost straight line anteriorly, barely sinuate. Hind border weakly, evenly sinuate. Fore disc with a more or less developed median sulcus and laterad of it with 4 (2+2) rugose, low ridges, semifused together; hind disc densely granulate.

SCUTELLUM shorter than its basal width (♂-29:40, ♀-33:40); all borders carinate, lateral straight, tip rounded. Median ridge strong, disc laterad of it irregularly obliquely rugose.

HEMELYTRA reaching 1/2 of tergum VII (♂), or hind border of tergum VI (♀); baso-lateral border of corium straight and carinate, apical angle acute, apical border subangularly convex.

ABDOMEN longer than its maximum width across segment IV (♂-96:81, ♀-109:82); lateral borders slightly convex, rounded; PE-angles of connexiva II to VI barely protruding; PE-VII rounded, reaching 2/5 of hypopygium (♂), or 1/2 of tergum VIII (♀). Discs of connexiva finely and densely granulate. Paratergites (♂) clavate, reaching 2/3 of hypopygium; the latter large, cordate, shorter than wide (16:29), with a stout and low, rounded posteriorly, median ridge, reaching 2/5 of disc. Paratergites (♀) large, rounded posteriorly, reaching tip of incised segment IX. All spiracles ventral, placed far from border. Metathoracic scentgland openings small, closed.

LEGS unarmed; femora with a row of fine granules inferiorly.

COLOR black; tibiae dark brown, labium and tarsi yellow brown.

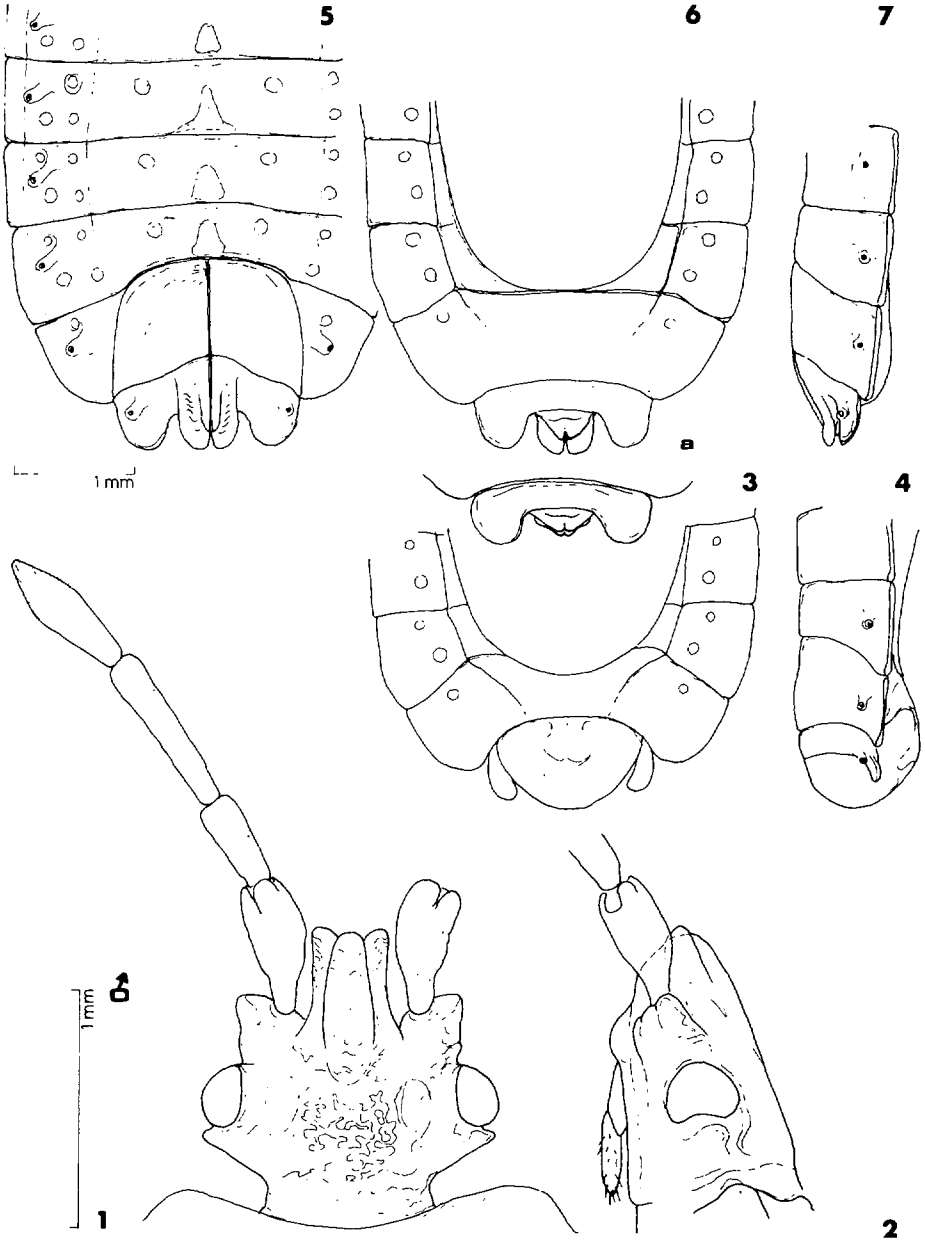

Fig. 1–7: *Mezira (Mezira) nuda* n. sp.; 1: head of holotype ♂; 2: head lateral; 3: holotype ♂, tip of abdomen dorsal; 4: lateral; 5: paratype ♀, tip of abdomen ventral; 6: dorsal; 6a: variation: 7: lateral.

Total length: ♂-7.68, ♀-8.16 mm; width of pronotum: ♂-2.68, ♀-2.80 mm; width of abdomen: ♂-3.24, ♀-3.28 mm.

Holotype ♂, NEPAL (West), Jumla District, near Moharigaon, 3000–3500 m. (Pa 211–212); 21. IX. 72 H. Franz coll; deposited in coll. Franz.

Allotype ♀, NEPAL (West), Jumla District, (Pa 217) H. Franz coll, in Kormilev collection.

Paratypes: 2 ♂♂, collected with holotype; 1 ♂, 1 ♀, NEPAL, Jumla Distr., near Talphi, 19. IX. 72; 1 ♀, NEPAL (West), Rarasee, Dampa Pass near Chauta; 1 ♂, 1 ♀, Jumla District, Dzunda Khola valley, all H. Franz coll. 2 ♀♀, from Moharigaon were not made paratypes, because of aberration of paratergites IX, which were only reaching, or even not reaching tip of segment IX.

Mezira (M.) nuda n. sp. stands rather apart in the genus, strange rugosity of head, fore disc of pronotum and scutellum is particular; then almost complete absens of pubescens is rather rare.

Mezira (Mezira) nepalensis, new species

Fig. 8–12, Foto 2

M a l e: Elongate ovate, covered with very short, curled, yellow hairs; head and pronotum granulate, connexivum finely punctured.

HEAD as long as its width across eyes (♂-35:34.5, ♀-40:37); anterior process long, with parallel sides, rounded and incised anteriorly, reaching 5/6, or almost reaching tip of antennal segment I. Antenniferous tubercles dentiform, acute, divaricating. Eyes reniform, protruding. Postocular tubercles acute, reaching outer border of eyes. Vertex finely and densely granulate; infraocular carinae low, infraocular callosities elongate and with a thin sulcus on fore half exteriorly. Antennae long and thin; relative length of antennal segments I to IV are: ♂-18:13:22.5:13, ♀-18:13:24:14. Labium produced beyond hind border of head.

PRONOTUM less than half as a long as its maximum width (♂-34:73, ♀-35:80) fore lobe narrower than hind lobe (♂-60:73, ♀-62:80); collar thin, granulate, truncate anteriorly. Antero-lateral angles evenly expanded and produced forward and sideways; lateral borders finely crenulate, parallel at humeri, converging and slightly sinuate anteriorly; hind border weakly sinuate medially, roundly produced laterally. Fore disc with 4 (2+2) granulate ridges, separated from each other and from lateral borders by deep depressions. Interlobal depression deep. Hind disc densely granulate and with an arquate depression along hind border.

SCUTELLUM shorter than its basal width (♂-35:42, ♀-37:45); all borders carinate; lateral borders straight, convex near apex; tip incised. Median ridge wide and low, disc transversely rugose.

HEMELYTRA reaching slightly over fore border of tergum VII. Basolateral border of corium almost straight, reflexed and crenulate; apical border angular, slightly sinuate interiorly and exteriorly, both portions forming an obtuse angle; apical angle almost right; disc finely granulate.

ABDOMEN ovate, longer than its maximum width across segment V (♂-103:92.5, ♀-121:108). PE-angles of connexiva slightly, but distinctly protruding; PE-VII forming right angle with rounded tip, reaching 1/2 of hypopygium. Paratergites (♂) clavate, slightly produced beyond tip of hypopygium; the latter strongly declivous, looking from above is much shorter than its maximum width (15:24); disc with a low ovate ridge, reaching

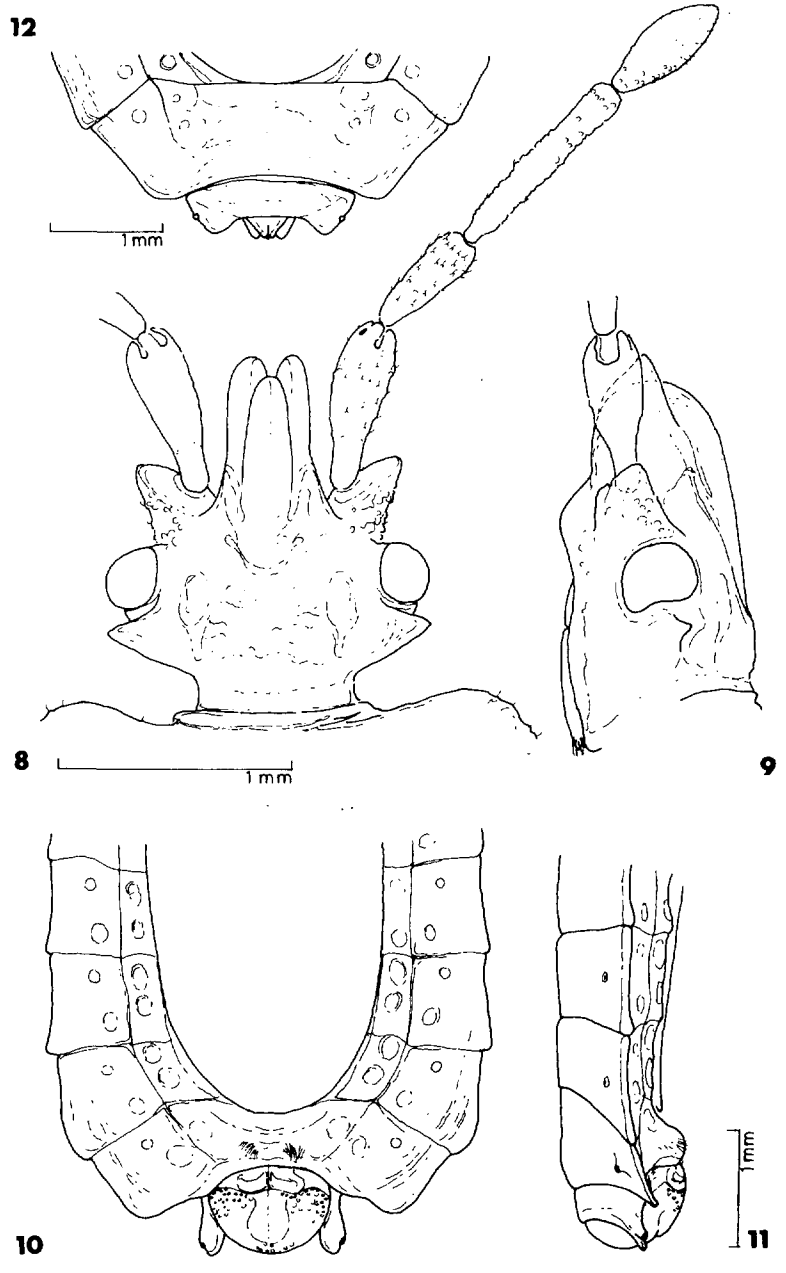

Fig. 8–12: *Mezira (Mezira) nepalensis* n. sp.; 8: head of holotype ♂; 9: head lateral; 10: holotype ♂, tip of abdomen dorsal; 11: lateral; 12: allotype ♀, tip of abdomen dorsal.

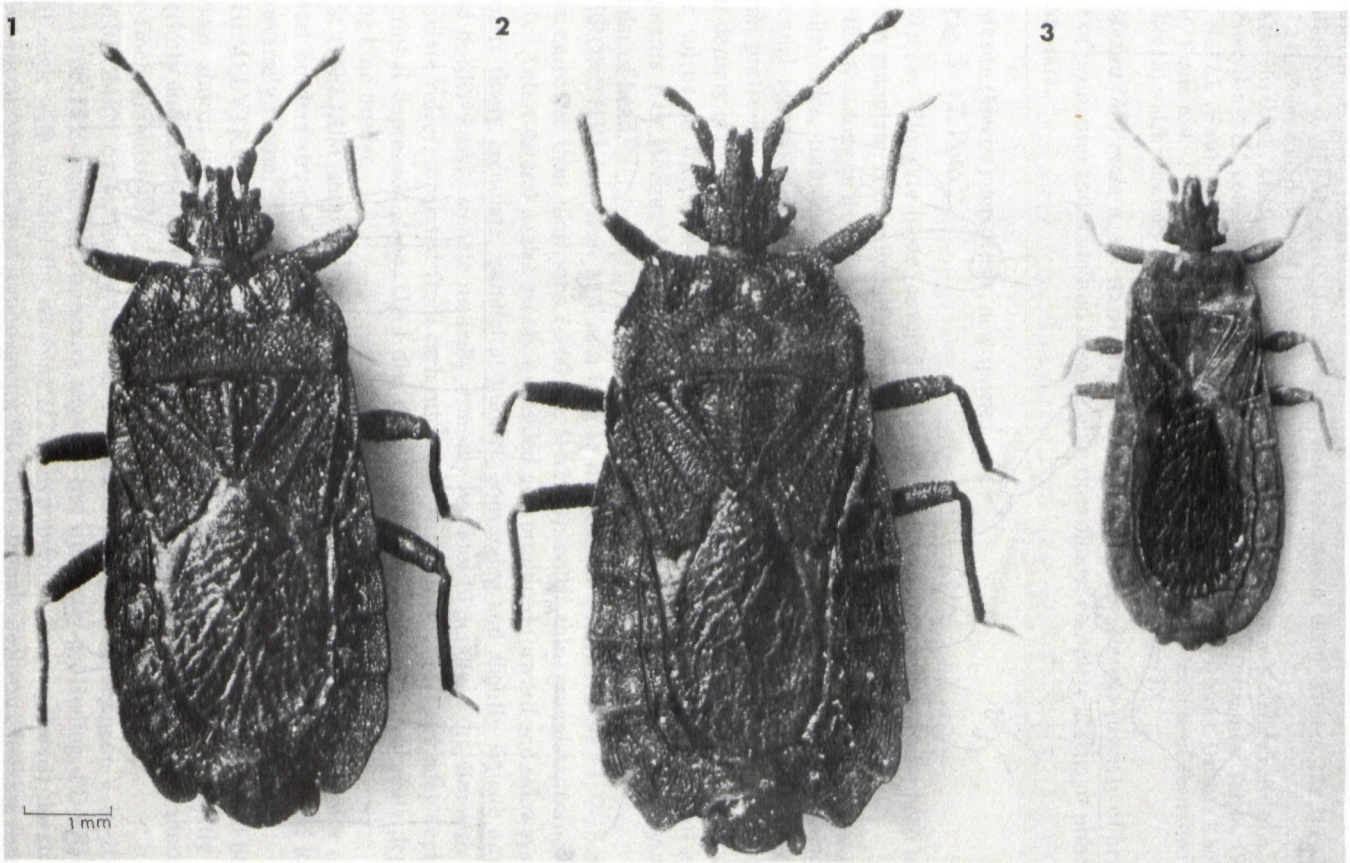

Foto 1–3: 1: *Mezira (Mezira) nuda* n. sp., Holotype ♂, 2: *Mezira (Mezira) nepalensis* n. sp., Holotype ♂; 3: *Neuroctenus franzi* n. sp., Holotype ♀.

3/4 of disc. Paratergites (♀) subtriangular, reaching 3/4 of segment IX. Spiracles II to VII ventral, placed far from border; VIII lateral and visible from above.

Metathoracic scentgland openings small, transverse, open.

LEGS unarmed.

COLOR dark ferrugineous, blackish on head and fore disc of pronotum; posterior borders of connexiva III to VII, tip of median ridge of hypopygium and tarsi are yellow brown.

Total length: ♂-8.44, ♀-9.44 mm; width of pronotum ♂-2.92, ♀-3.20 mm; width of abdomen ♂-3.70, ♀-4.32 mm.

Left antennal segment III+IV, left fore-, middle- and hind tarsi and distal part of left middle tibia are missing in holotype.

Holotype ♂, NEPAL (Central), Kali-Gandaki valley, between Ghasa and Lete; IX-X 1971, H. Franz coll; deposited in coll. Heiss.

Allotype ♀, collected with holotype; Kormilev collection.

Relation with other species may be seen from the key.

Mezira (Mezira) himalayensis, new species

Fig. 13–17, Foto 4, 5

M a l e: Closely related to *Mezira (M.) nepalensis* n. sp., but smaller; antennal segment II shorter than IV, pronotum more narrowed anteriorly and more produced forward, than sideways. Partergites (♂) shorter, not reaching tip of hypopygium.

MEASUREMENTS: head ♂-30:30, ♀-33:34; relative length of antennal segments I to IV are: ♂-15:10:18:12, ♀-17.5:12:18:13.5; pronotum ♂-27:61, ♀31:70; ratio width of fore lobe: width of hind lobe as ♂-48:61, ♀-55:70 scutellum ♂-28:34, ♀-30:36; abdomen ♂-87:80 across segment V, ♀-105:95 across segment IV; hypopygium 14:22.5.

Paratergites (♀) subtriangular, rounded posteriorly, produced as far as a short, tricuspidate segment IX. Spiracles II to VII ventral, places far from border; VIII lateral and visible from above.

COLOR: as in *M. nepalensis* n. sp.

Total length: ♂-7.00, ♀-8.12 mm; width of pronotum; ♂-2.44, ♀-2.80 mm; width of abdomen: ♂-3.20, ♀-3.80.

Holotype ♂, NEPAL, Dzunda-Khola valley, near Talphi, west of Jumla; 3000–3500 m; under the bark of rotten walnut trees, 19. IX. 72 (Pa 189); deposited in coll. Franz.

Allotype ♀, collected with holotype; Kormilev collection.

Paratypes 2 ♂♂, 1 ♀, collected with holotype; 3 ♂♂, 3 ♀♀ same locality (Pa 194), H. Franz coll.

Subgenus Zemira KORMILEV, 1971

Mezira (Zemira) membranacea (FABRICIUS)

Aradus membranaceus FABRICIUS, 1803, Syst. Rhyng.; p. 118
Brachyrhynchus orientalis AMYOT & SERVILLE, 1843, Hist. Nat. Ins.: 305
Brachyrhynchus membranaceus STAL, 1868, Hem. Fabr.: 96.
Mezira membranacea DISTANT, 1910. Fauna Brit. India, **5**: 131.
Mezira (Zemira) membranacea KORMILEV, 1971, Pacif. Ins. Mon., **26**: 44.
1 ♂, 3 ♀♀, NEPAL, Amlekhgani, Therai, 7.–10. X. 1972, H. Franz coll.

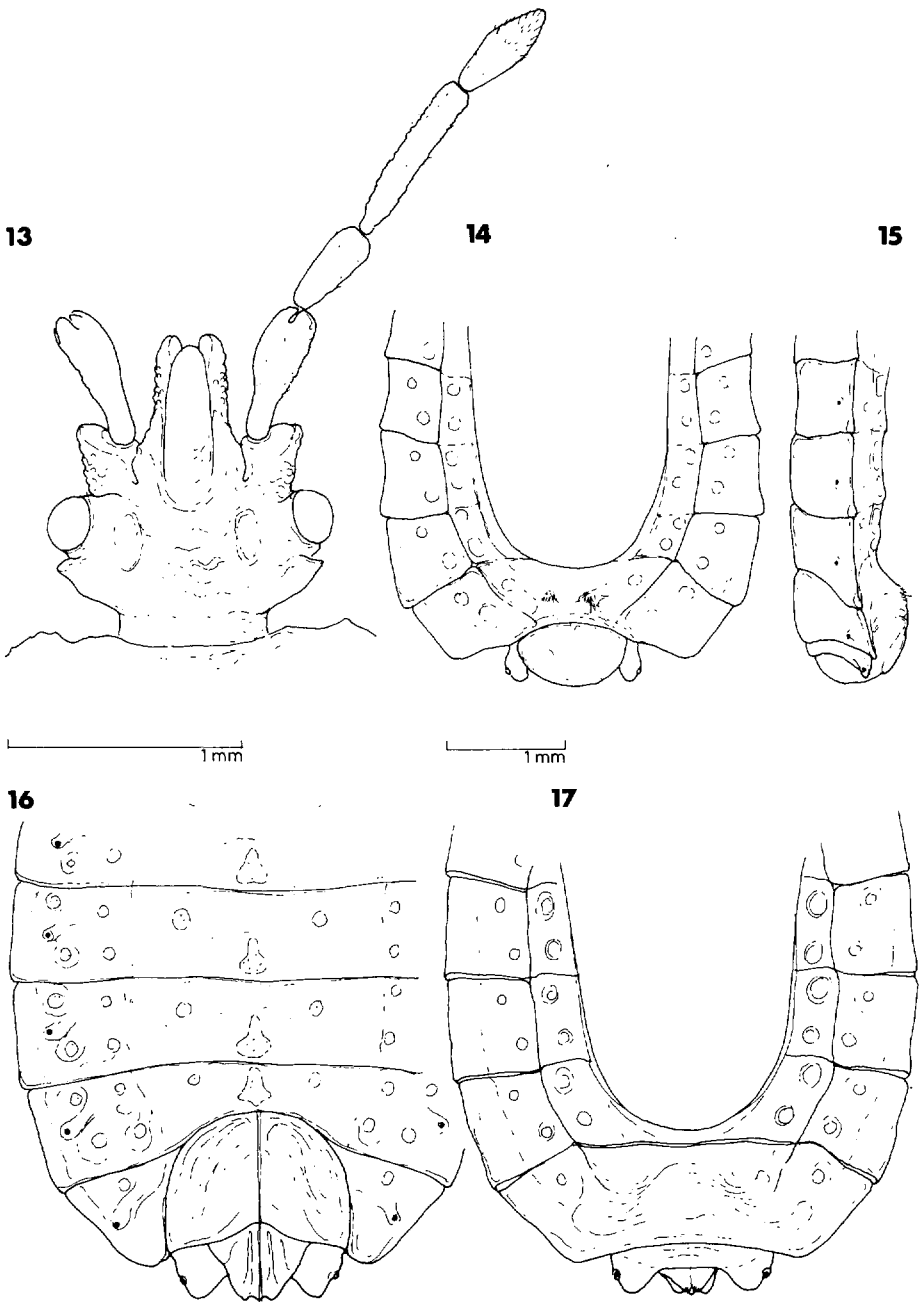

Fig. 13–17: *Mezira (Mezira) himalayensis* n. sp.; 13: head of holotype ♂; 14: holotype ♂, tip of abdomen dorsal; 15: lateral; 16: paratype ♀, tip of abdomen ventral; 17: dorsal.

Genus Daulocoris USINGER and MATSUDA, 1959
Daulocoris robustus KORMILEV

Daulocoris robustus KORMILEV, 1971, Pacif. Ins. Mon.; **26**: 105.
1 ♂, 1 nymph, NEPAL, Ghokarna near Kathmandu, 3. VIII. 70; H. Franz coll.

Daulocoris nepalensis, new species
Fig. 18–21, Foto 6

M a l e: Elongate ovate, widening backward; partially covered with dense tomento; PE-VII (♂) curled up.

Closely related to *Daulocoris robustus* KORMILEV, 1971, but smaller; jugae relatively longer, leaving only 1/3 of length of anterior process free (1/2 in *D. robustus*); postocular tubercles dentiform, not cylindrical, slightly produced beyond outer borders of eyes (cylindrical in *D. robustus*); antennal segment IV the longest (shorter than III in *D. robustus*); labium longer, produced slightly beyond fore border of prosternum (not reaching prosternum in *D. robustus*). Labial atrium closed, split-like. Other characters as in *D. robustus*.

MEASUREMENTS: head 41:45; relative length of antennal segments I to IV are: 17:21:21:22; pronotum 43:85; ratio width of fore lobe: width of hind lobe as 70:85; scutellum 40:45; abdomen 130:100; hypopygium 33:37.5, hypopygium cordate, median ridge ovate, reaching 2/3 of disc.

COLOR: black; connexivum and ventral side dark ferrugineous; labium and tarsi are ferrugineous. Total length 10.00 mm; width of pronotum 3.40 mm; width of abdomen 4.00 mm.

Right antennal segment IV, right middle an hind leg missing in holotype.

Holotype ♂, NEPAL, Ghokarna near Kathmandu; under bark of *Pinus* sp., 3. X. 71 (Pa 148a, b); H. Franz coll.; deposited in Heiss collection.

Genus Arictus STAL, 1865.

Arictus was established by STAL in Hemiptera Africana, but without designating a type species. In 1871, STAL refered to *Arictus* one species from Philippines, but in 1873 reduced *Arictus* to subgenus of *Brachyrhynchus* LAPORTE, 1832. In 1886 BERGROTH synonymized Arictus with *Brachyrhynchus* LAPORTE. Only in 1959, USINGER and MATSUDA revalidated *Arictus* as a genus.

Arictus usingeri (KORMILEV), 1955
Mezira usingeri KORMILEV, 1955, Rev. Ecuat. Ent. Par.; **2**: 494.
Arictus usingeri USINGER & MATSUDA, 1959, Class. Aradidae; p. 314. 1 ♂, THAILAND, Sakaerat Exp. Stat.; under rotten bark, 14.–16. VIII. 70 (Pa 19); H. Franz coll.

Genus Neuroctenus FIEBER, 1861
Neuroctenus franzi, new species
Fig. 22–24, Foto 3

F e m a l e: Elongate ovate; head, pronotum, scutellum, connexivum and tergum VII, very finely granulate; corium finely scabrous.

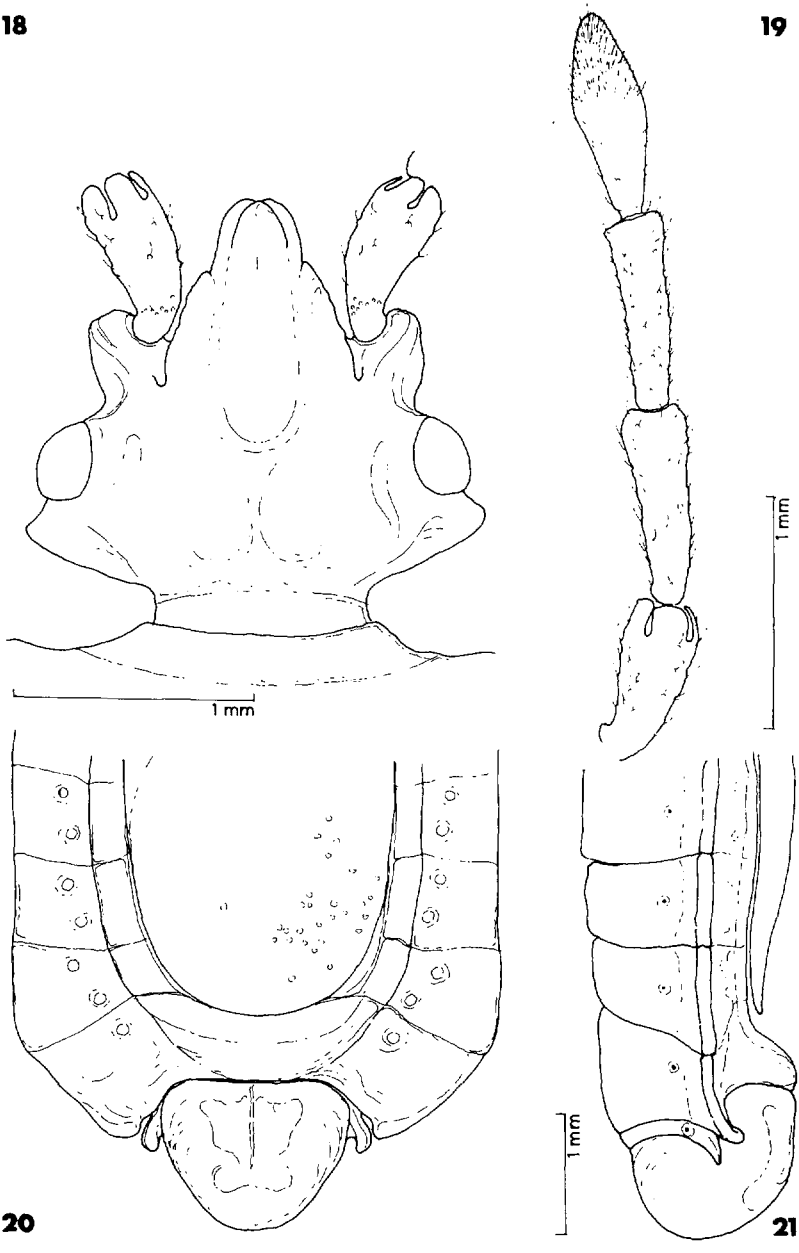

Fig. 18–21: *Daulocoris nepalensis* n. sp., holotype ♂; 18: head; 19: left antenna; 20: tip of abdomen dorsal; 21: lateral.

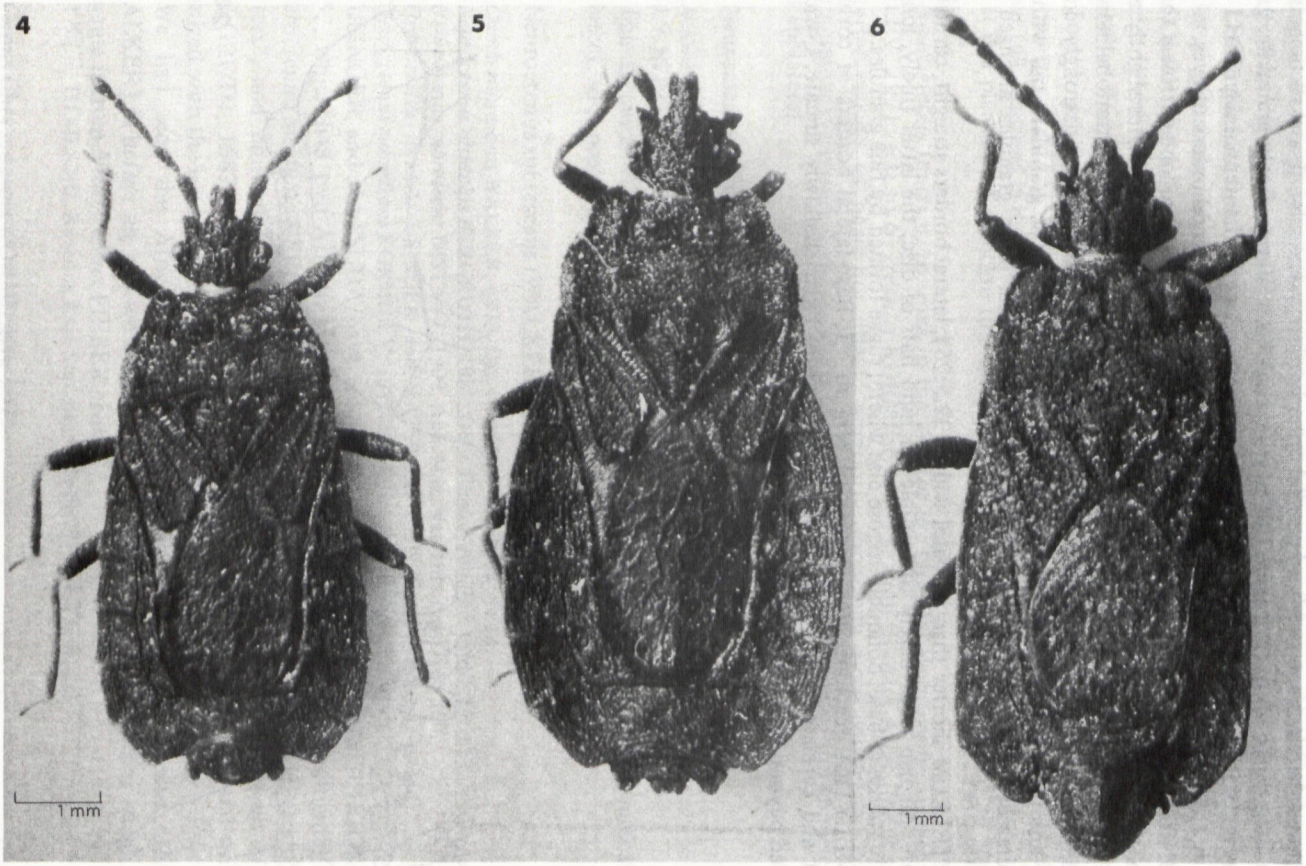

Foto 4–6: 4: *Mezira (Mezira) himalayensis* n. sp., Holotype ♂; 5: Paratype ♀; 6: *Daulocoris nepalensis* n. sp., Holotype ♂.

HEAD slightly longer than its width across eyes (22:20.5); anterior process tapering, rounded and incised anteriorly, reaching slightly beyond tip of antennal segment I. Antenniferous tubercles acute, with subparallel outer borders; postocular almost rectangular, not reaching outer border of eyes; the latter semiglobose. Vertex finely granulate, granules arranged in transverse rows. Antennae thin; relative length of antennal segments I to IV are: 8:7:8.5:10. Labium short, not reaching line connecting hind borders of eyes.

PRONOTUM much shorter than its maximum width (16:40); fore lobe narrower than hind lobe (30:40). Collar very thin, sinuate anteriorly. Antero-lateral angles slightly expanded and evenly rounded, produced forward as far as collar laterally. Interlobal notch distinct, forming an obtuse angle. Lateral borders of hind lobe convex, strongly converging anteriorly. Hind border slightly, evenly sinuate. Fore disc granulate and with 4 (2+2) crescent-shaped callosities; hind disc also granulate, some granules arranged in transverse rows.

SCUTELLUM shorter than its basal width (22.5:25); lateral borders straight, carinate; tip acute. Median ridge barely discernible on hind half of disc; the latter finely, longitudinally rugose at base; obliquely rugose else where; rugae formed by fine granules.

HEMELYTRA reaching hind border of tergum VI. Baso-lateral borders of corium straight and carinate; apical angle acute; apical border twice shallowly sinuate. Corium produced beyond fore border of connexivum III.

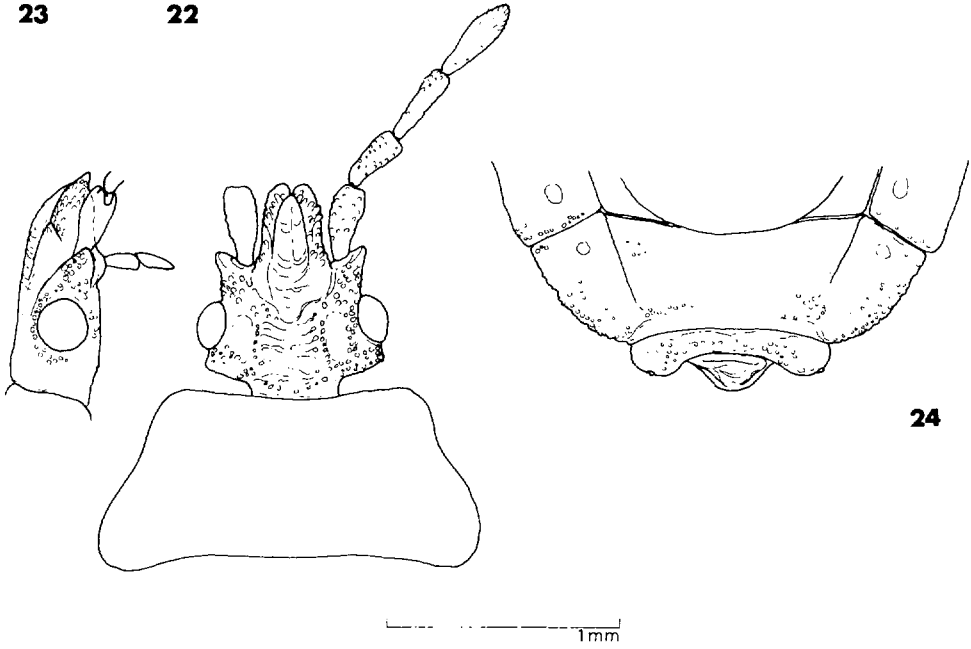

Fig. 22–24: *Neuroctenus franzi* n. sp., holotype ♀; 22: head and pronotum; 23: tip of abdomen.

ABDOMEN ovate, longer than its maximum width across segment IV (77.5:54); lateral borders evenly rounded; PE-angles of connexiva II to VI slightly protruding; PE-VII rounded. Paratergites rounded, reaching 1/2 of a rounded posteriorly segment IX. Spiracles II to VII ventral, placed far from border, VIII lateral and visible from above.

LEGS: femora fusiform, granulate; tibiae with a row of fine granules exteriorly, granules progressively increasing in size from base to apex.

COLOR: light ferrugineous (immature?), head, pronotum, with exception of hind border, basal 2/3 of scutellum, and corium, are dark ferrugineous; membrane black, whitish at base exteriorly.

Total length 5.64 mm; width of pronotum 1.60 mm; width of abdomen 2.1 mm.

Holotype ♀, NEPAL (Central), rout from Pokhara to Goropani; IX–X 1971 (Pa 137–138); H. Franz coll. Deposited in Heiss collection.

It is a pleasure to dedicate this species to Prof. H. Franz, who collected all species in this lot.

Neuroctenus franzi n. sp. runs in the key for the Oriental *Neuroctenus* species (KORMILEV, 1971: 63) to *N. gressitti* KORMILEV, 1971, from Bismark Arch., but is smaller, anterior process of head not dilated anteriorly; pronotum more constricted laterally; paratergites (♀) rounded and produce to middle of segment IX only, and spiracle VII is not sublateral.

Neuroctenus affinis DISTANT, 1903

Neuroctenus affinis DISTANT, 1903, Fauna Brit. India, Rhynch. **2**: 165.

1 ♀, NEPAL, near Barahbise, Ting-Sang-La (Pa 5–6); H. Franz coll.

This specimen is larger than indicated by DISTANT, but the latter never indicated sex of insect, so it probably was a male.

Neuroctenus rubrescens (WALKER), 1873

Crimia rubrescens WALKER, 1873, Cat. Hem. Het. Brit. Mus.; **7**: 14.
Neuroctenus nitidulus BERGROTH, 1887, Oefv. Finska Vet. Soc. Förh., **29**: 177.
Neuroctenus rubrescens DISTANT, 1902, Ann. Mag. Nat. Hist.; ser. 7, **9**: 360.
Overlaetiella nitidula USINGER and MATSUDA, 1959, Class. Aradidae, p. 266.
Neuroctenus rubrescens KORMILEV, 1971. Pacif. Ins. Monograph, **26**: 91.

USINGER and MATSUDA have recognized the genus *Overlaetiella* SCHOUTEDEN, 1952, which had two African species (1959: 264), indicating that the Oriental species *Neuroctenus nitidulus* BERGROTH, 1887, "agrees with *Overlaetiella* in all essential characters", and omitted it from the List of *Neuroctenus* species. *Neuroctenus nitidulus* BERGROTH, 1887, is identical with *Crimia rubrescens* WALKER, 1873, and was synonymized with the latter by the first author (1971: 91).

We had seen the African species of *Overlaetiella,* but *Neuroctenus rubrescens* (WALKER) is before us, and we could not find a single generic character, which would separate it from *Neuroctenus* FIEBER, 1861.

1 ♂ 1 ♀, THAILAND, Kachong Exp. Stat. near Trand, 1970, H. Franz coll.

Genus Chrysodaspis KORMILEV, 1971

The genus *Chrysodaspis* was separated from *Mezira* A. S., 1843, on a base of a curious pattern of carinae on the venter, which is slightly different in each species. The males

have the space between carinae covered with a dense tomento, whereas the females have no tomento.

Chrysodaspis gigantea (KORMILEV), 1955

Mezira gigantea KORMILEV, 1955, Rev. Ecuat. Ent. Paras.; **2**: 490.
Mezira (Zemira) gigantea KORMILEV, 1971, Pacif. Ins. Mon.; **26**: 62.
Chrysodaspis gigantea KORMILEV and HEISS, New combination.

Fig. 25

F e m a l e: Elongate ovate; roughly granulate on head and pronotum.

HEAD almost as long as its width across eyes (54:55); anterior process tapering, barely incised anteriorly, reaching 1/2 of antennal segment I. Antenniferous tubercles strong, truncate anteriorly and slightly divaricating. Eyes moderately large, protruding. Postocular tubercles blunt, by far not reaching outer borders of eyes. Vertex roughly granulate, infraocular carinae low, with semiobliterated granules. Antennae long and strong, more than 2.5 x as long as width of head across eyes (147:55); relative length of antennal segments I to IV are: 33:43:40:31. Labium not reaching hind border of labial groove, which is wide, deep and open posteriorly. Labial atrium closed, split-like.

PRONOTUM more than half as long as its maximum width (75:138), fore lobe narrower than hind lobe (106:138). Collar glossy, produced forward and truncate anteriorly. Anterior borders receeding, granulate; antero-lateral angles rounded, slightly expanded and produced sideways. Lateral notch sinuate; lateral borders of hind lobe parallel, evenly converging anteriorly. Hind border deeply sinuate medially, produced backward at hind angles. Fore disc with 4 (2+2) ridges, which are obliterated and fused together anteriorly, separated by deep sulci and overhanging interlobal depression posteriorly. The latter is very deep and narrow. Hind disc roughly granulate; granulation is some what obliterated medially, where disc is depressed.

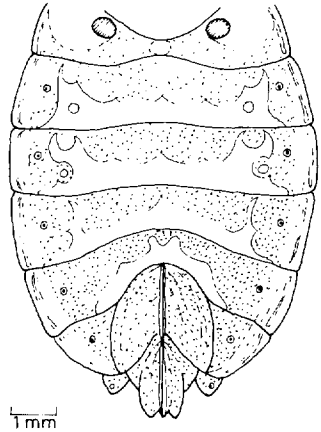

Fig. 25: *Chrysodaspis gigantea* KORM.; female, abdomen, ventral.

SCUTELLUM strongly produced forward and rounded anteriorly; lateral borders straight and carinate, tip angularly rounded; disc roughly, transversely rugose and with a few, rough granules laterally. Median ridge stout, but not very prominent.

HEMELYTRA reaching hind border of tergum VI; baso-lateral border of corium reflexed, apical angle angular, apical border barely sinuate. Clavus very narrow, tapering backward. Membrane with anastomosed veins.

ABDOMEN longer than its maximum width across segment IV (215:180); PE-angles of connexiva II to VI blunt, slightly protruding; PE-VII rounded, slightly produced beyond tergum VII; discs of connexiva rugose exteriorly, with 2 round callous spots interiorly, but without granulation. Paratergites angular, reaching basal 1/3 of a strong, tricuspidate segment IX. All spiracles ventral and not visible from above.

PROSTERNUM with a strong median ridge, widening backward and there rounded. Meso and metasternum depressed medially. Pro, meso and metasternum covered with setigerous granulation, setae yellow and inclined.

Metathoracic scentgland openings long, straight, closed.

VENTER with a pattern of glossy elevations along hind borders of sterna III to VI, produced forward medially and midlaterally; discs between these elevations are roughly granulate, but without tomento; exterior borders of sterna II to VII longitudinally rugose.

LEGS: femora with a few short teeth on inferior side anteriorly; claws without arolia.

COLOR: black; antennae, labium, legs and venter, are very dark ferrugineous.

Total lenght 16.60 mm; width of pronotum 5.52 mm; width of abdomen 7.20 mm.

Type ♀, BORNEO, Xantus; leg. ignotus. Deposited at the Hungarian National Museum, Budapest.

C. gigantea (KORMILEV) runs in the key for *Chrysodaspis* species (KORMILEV, 1971: 100) to *C. ovatus* KORMILEV, 1971, but antenniferous tubercles are truncate, postocular by far not reaching outer borders of eyes, lateral notch of pronotum sinuate, paratergites shorter.

Mezira teter (BERGROTH), 1894, probably belongs to *Chrysodaspis* but we could not verify, as the type could not be found.

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