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Synonymical notes on *Scironocoris* KORMILEV 1957, *Rustem* KORMILEV 1957 and *Pseudartabanus* ESAKI & MATSUDA 1952, with description of a new genus and species (Heteroptera, Aradidae).

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A b s t r a c t

Examination of type specimens of the Oriental Aradidae genera *Scironocoris* KORMILEV 1957, *Rustem* KORMILEV 1957 and *Pseudartabanus* ESAKI & MATSUDA 1952, led to the following results: *Scironocoris* KORMILEV 1957 = *Rustem* KORMILEV 1957, syn. nov.; *Rustem bellicosus* KORMILEV 1957 = *Scironocoris bellicosus* (KORMILEV 1957), comb. nov.; *Scironocoris armigerus* KORMILEV 1957 = *Scironocoris australicus* MONTEITH 1997 syn. nov., *Pseudartabanus armatus* HEISS 1982, transferred to *Scironocoris* by MONTEITH 1997, is the type species of *Neartabanus* gen. nov.; Lectotype is designated for *Artabanus sexspinosus* BERGROTH 1892 (= *Dimorphacantha sexspinosus* USINGER & MATSUDA 1959 = *Scironocoris sexspinosus* MONTEITH 1997) and transferred to *Neartabanus*, hence *Neartabanus sexspinosus* (BERGROTH 1892) comb. nov.; *Neartabanus laoticus* sp. nov. is described from Laos; *Pseudartabanus brachypterus* KORMILEV 1971, of which topotypical material could be studied, is regarded as the brachypterous form of *P. formosanus*, therefore *Pseudartabanus formosanus* ESAKI & MATSUDA 1952 = *Pseudartabanus brachypterus* KORMILEV 1971, syn. nov.

Illustrations are included for all species treated and of the parameres of *Neartabanus armatus*. A key is given to the SE-Asian genera of Mezirinae with preapical spines on all femora and to the species of *Neartabanus* gen. nov.

Z u s a m m e n f a s s u n g

Die Untersuchung von Typenmaterial der orientalischen Aradidengattungen *Scironocoris* KORMILEV 1957, *Rustem* KORMILEV 1957 und *Pseudartabanus* ESAKI & MATSUDA 1952 hat zu folgenden Ergebnissen geführt: *Scironocoris* KORMILEV 1957 = *Rustem* KORMILEV 1957, syn. nov.; *Rustem bellicosus* KORMILEV 1957 = *Scironocoris bellicosus* (KORMILEV 1957), comb. nov.; *Scironocoris armigerus* KORMILEV 1957 = *Scironocoris australicus* MONTEITH 1997 syn. nov., *Pseudartabanus armatus* HEISS 1982, von MONTEITH 1997 zu *Scironocoris* gestellt, ist die Typusart von *Neartabanus* gen. nov.; ein Lectotypus wird für *Artabanus sexspinosus* BERGROTH 1892 (= *Dimorphacantha sexspinosus* USINGER & MATSUDA 1959 = *Scironocoris sexspinosus* MONTEITH 1997) designiert und in die Gattung *Neartabanus* gestellt, daher *Neartabanus sexspinosus* (BERGROTH 1892) comb. nov.; *Neartabanus laoticus* sp. nov. aus Laos wird beschrieben; *Pseudartabanus brachypterus* KORMILEV 1971, von dem nun topotypisches Material vorlag, ist nur die brachyptere Form

von *P. formosanus*, daher *Pseudartabanus formosanus* ESAKI & MATSUDA 1952 = *Pseudartabanus brachypterus* KORMILEV 1971, syn. nov.

Die besprochenen Arten werden abgebildet und von *Neartabanus armatus* erstmals die Parameren dargestellt. Ein Bestimmungsschlüssel für die südostasiatischen Gattungen der Mezirinae mit einem Dorn auf allen Femora und für die Arten der Gattung *Neartabanus* gen. nov. wird vorgelegt.

Key words: Heteroptera, Aradidae, Mezirinae, *Scironocoris*, *Rustem*, *Pseudartabanus*, *Neartabanus*, new genus, new species, synonymy, Oriental Region, Australia.

Introduction

Of the subfamily Mezirinae OSHANIN 1908, four genera were reported to date from the SE-Asian and Australian Region bearing distinct preapical spines on all femora (except 2 of the 3 spp. of *Pseudartabanus* from Taiwan), following KORMILEV & FROESCHNER 1987: *Dimorphacantha* USINGER & MATSUDA 1959 (5 spp. from S-China & Sunda Islands), *Pseudartabanus* ESAKI & MATSUDA 1952 (3 spp. from Taiwan and India), *Rustem* KORMILEV 1957 (1 sp. from „Persia“) and *Scironocoris* KORMILEV 1957 (5 spp. Malaysia, Bali, New Guinea).

In his excellent revision of the Australian Mezirinae, MONTEITH (1997) synonymized *Dimorphacantha* with *Scironocoris* and transferred the five species to this genus, including also *Dimorphacantha sexspinosa* (BERGROTH 1892) from Burma which had been omitted by KORMILEV & FROESCHNER 1987, and described *Scironocoris australis* from material from Cape York in Northern Australia and New Guinea. He also drew attention to *Rustem* as a possible synonym of *Scironocoris* and to *Pseudartabanus*, of which he transferred *P. armatus* HEISS 1982, also to *Scironocoris*.

Dimorphacantha is not regarded as a synonym of *Scironocoris* but as a distinct genus with discrete characters, which will be discussed in a forthcoming paper (HEISS in preparation).

Preparing the chapter Aradidae for the new Catalogue of the Heteroptera of the Palaearctic Region I found it necessary to verify the expected synonymy of supposedly palaearctic *Rustem* with Oriental *Scironocoris*. A comparative study of the type specimens of both genera and of additional material led to unexpected results, which are presented here.

Measurements are given in millimeters or 40 units = 1 mm. Abbreviations used for institutions correspond to those of the Catalogue of the Heteroptera of the Palaearctic Region.

Revised key to the species of SE-Asian Mezirinae with a preapical spine on each femur

- 1 (2) Venter without metapleural spines or knobs; paired ovate depressions on sternite VII in male present (Figs. 9, 10); spiracles II to VII ventral, VIII ventral or sublateral but not visible from above; NE-India, Burma, Laos, ? S-China *Neartabanus* gen. nov.
- 2 (3) Venter with distinct metapleural spines of variable sizes in males, females with a small polished knob or tubercle in the same position; ovate depressions on sternite VII in male lacking; spiracles II to VII ventral, VIII terminal and visible from above 3

- 3 (4) Males only with small spines, females with a polished tubercle, both situated mesad the line connecting the outer margins of meso- and metacoxae; pronotum without distinct lateral projections; macropterous or brachypterous; New Guinea, Malaysia, Indonesia (Bali)

Scironocoris KORMILEV = *Rustem* **syn. nov.**

- 4 (3) Males with distinct larger subapical spines, females with a polished knob, both situated laterad the line connecting the outer margins of meso- and metacoxae; pronotum with distinct, in brachypterous species reduced lateral projections; macropterous or brachypterous (Sunda Islands, ?South China)

Dimorphacantha USINGER & MATSUDA **stat. rest.**

Pseudartabanus is omitted from the key, as *armatus* HEISS is transferred to *Neartabanus* and the remaining species have no femoral spines.

Scironocoris KORMILEV 1957

Scironocoris KORMILEV 1957a: 401 (descr.); MONTEITH 1997: 54 (diagn.).

Type species: *Scironocoris armigerus* KORMILEV 1957, by original designation.

The holotype of the type species was examined with following results:

Scironocoris armigerus KORMILEV 1957 (Fig. 1-2)

Scironocoris armigerus KORMILEV 1957a: 402 (fig. 17-18); KORMILEV 1971: 26 (key); KORMILEV & FROESCHNER 1987: 191 (catalogue of spp.); MONTEITH 1997: 55 (listed).

H o l o t y p e : Brachypterous female labelled: „N. Guinea \ Biró 96“; „Friedrich - \ Wilh.-hafen“ (printed); „Holotype“ (printed red label); „*Scironocoris \ armigerus \ N.KORMILEV 55*“ (handwr.), in HMHN (Hungarian National History Museum, Budapest).

In the description of the genus it is stated (p.402): „fourth sternite provided with a stridulatory apparatus ...“ and „fore and middle femora unarmed“. Reexamination of the cleaned holotype proved, that both statements were erroneous. There is no trace of a „stridulatory apparatus“ and all femora have distinct preapical spines (Fig. 1). When the same author later described two macropterous species (*S. obscurus*, *S. papuasicus*) from New Guinea he did not mention any stridulatory apparatus but stated, that each femur of his new species have long femoral spines (KORMILEV 1971: 26, 27).

These contradictory statements of characters led to misinterpretation of *Scironocoris* species, so that MONTEITH 1997: 55 summarized the generic characters in a new diagnosis for *Scironocoris* including those of *Dimorphacantha* USINGER & MATSUDA 1959, which he regarded as a synonym.

A d d i t i o n a l m a t e r i a l e x a m i n e d : ♀ ♂ brachypterous „Papua: Fly R. \ Olsobip, 700- \ 1150 m, 23.8.69“; „J. & M. Sedlacek \ Collectors \ Bishop“; „*Scironocoris \ armigerus* KORMILEV \ Det. KORMILEV 70“, in authors collection (EH). The ♀ is identical with the holotype and the ♂ shares all essential characters of the ♀ except the more elongate body

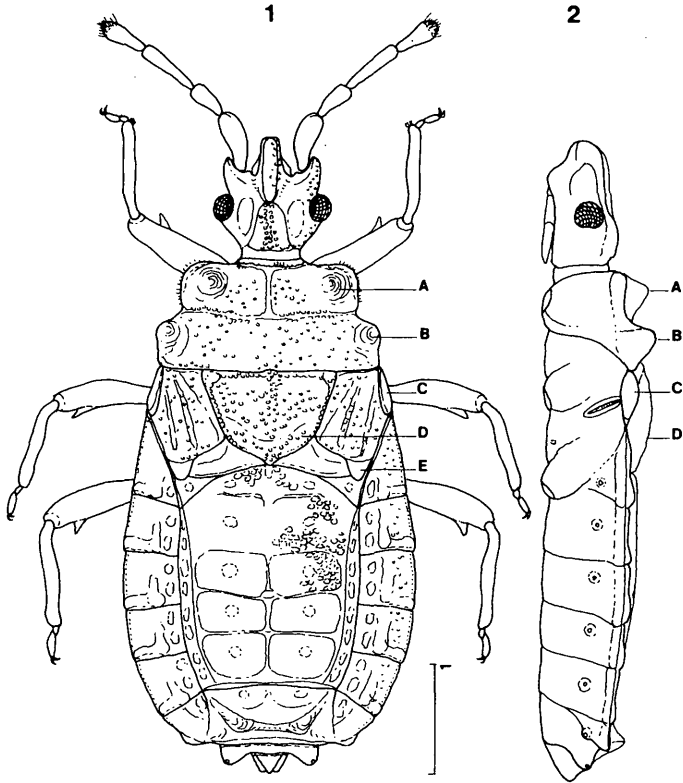


Fig. 1 - 2 *Scironocoris armigerus* KORMILEV; 1 - Holotype female, dorsal view; 2 - ditto, lateral view. Abbreviations: A - anterolateral elevation; B - posterolateral elevation of pronotum; C - reflexed base of corium; D - scutellum; E - vestige of membrane. Scale = 1 mm.

and the presence of a short, conical spine on each metapleuron immediately anterior to hind coxae. This female and the holotype of *armigerus* show a shiny swelling at the same position. MONTEITH 1997: 56 described *Scironocoris australicus* from specimens from the Cape York Peninsula and from New Guinea, without including the latter as paratypes. Comparison of a paratype ♂ with the abovementioned ♂ shows that they belong to the same taxon representing another species common to New Guinea and N-Australia as e.g., *Artabanus sinuatus*, *Artabanus bilobiceps*, *Chinessa bispiniceps*, *Neuroctenus eurycephalus* and others. Therefore it is proposed:

Scironocoris armigerus KORMILEV 1957 = *Scironocoris australicus* MONTEITH 1997 **syn. nov.**

Studies by HEISS & HOBERLANDT 1985, MONTEITH 1969, 1997 have shown, that brachypterous and macropterous forms of the same Mezirinae taxon may differ considerably in general aspect and have been inadvertently described as two species (e.g. *Caecicoris microcerus* and *oviventris*). Therefore it seems very likely that *Scironocoris obscurus* KORMILEV 1971, is the macropterous morph of *armigerus*, which should be checked with the types.

***Rustem* KORMILEV 1957**

Rustem KORMILEV 1957b: 39 (descr.); MONTEITH 1997: 55 (suspected synonymy with *Scironocoris*).

Type species: *Rustem bellicosus* KORMILEV 1957, by original designation.

The holotype of the type species was examined with following results:

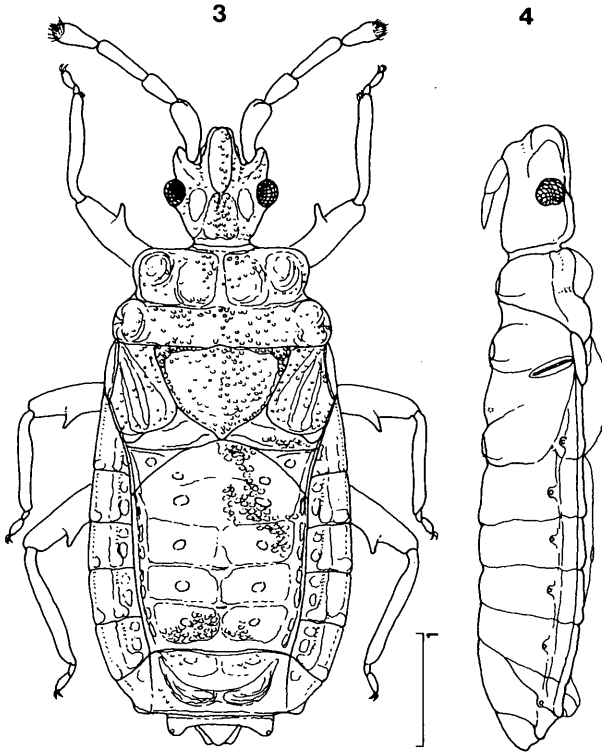


Fig. 3-4 *Rustem bellicosus* KORMILEV; 3 - Holotype female, dorsal view; 4 - ditto, lateral view. Scale = 1mm.

***Rustem bellicosus* KORMILEV 1957 (Fig. 3-4)**

Rustem bellicosus KORMILEV 1957b: 41 (Fig. 3-6); KORMILEV & FROESCHNER 1987: 189 (catalogued).

H o l o t y p e: Brachypterous female labelled: „Persia“ (= now Iran) (handwr.); „Holotype“ (printed red label); „C. J. Drake \ coll. 1956“ (printed); „*Rustem bellicosus* \ N. KORMILEV 956“ (handwr.), in USNM (US National Museum of Natural History, Smithsonian Institution, Washington).

Examination of the holotype (and only known specimen) proved that *Rustem* fits in all characters with the genus *Scironocoris* sensu MONTEITH 1997, and is a synonym of the latter. Therefore it is proposed:

Scironocoris KORMILEV 1957 = *Rustem* KORMILEV 1957 **syn. nov.** and

Scironocoris bellicosus (KORMILEV 1957) **comb. nov.**

Scironocoris bellicosus seems closely related to *armigerus* but differs by the following characters:

armigerus ♀ (Fig. 1-2)

abdomen more rounded laterally
clypeus narrow
ratio width / length of pronotum 2.04
anterolateral elevations of pronotum
higher and more pointed

bellicosus ♀ (Fig. 3-4)

abdomen less rounded, subparallel
clypeus wider
pronotum shorter, ratio w / l 2.23
more flat and rounded

As all other species assigned to *Scironocoris* sensu MONTEITH 1997 belong to the Oriental - Australian fauna, it is obvious that the locality label „Persia“ is erroneous and the species is to be excluded from the Iranian fauna. Yet it is still unclear if one of the later described brachypterous species is synonymous with *bellicosus*.

Neartabanus gen. nov.

The species described as *Pseudartabanus armatus* HEISS 1982 has been transferred to *Scironocoris* by MONTEITH 1997 due to the spined femora and the structure of head and pronotum.

Reexamination of the holotype ♂ from NE-India showed that this species neither belongs in *Scironocoris*, lacking metapleural spines, nor in *Pseudartabanus*, although it has the paired ovate depressed structures on sternite VII in male, but has spined femora. Therefore a new genus is proposed to include this and other species.

D i a g n o s i s : General aspect similar to *Scironocoris* and *Pseudartabanus*, but is distinguished from *Scironocoris* by lacking the metapleural spines and having ovate depressed structures on sternite VII of male which in turn is shared by *Pseudartabanus*, but the latter has unarmed femora and different pronotal structure. From both genera it differs also by the ventral position of all spiracles.

D e s c r i p t i o n : Medium-sized, brachypterous and macropterous. Body granulate, postero-exterior (PE-) angles of dorsal external laterotergites (Deltg) II - VII, legs and antennae with pubescence, hairs stiff and curved at tips.

H e a d : Wider or about as long as wide; antenniferous tubercles short with blunt apices; clypeus short with genal processes slightly projecting over clypeus, with a pair of distinct laterad tubercles at a lower level, these visible from above. Antennae long, more than 2.2 x as width of head across eyes, with segments I and III longer than II and IV. Eyes moderately exerted, postocular portion of head straight, without tubercles, strongly converging to collar. Laterad of the collar a pair of distinct tubercles visible from above, those placed at a lower level. Rostral atrium slit-like; rostrum not reaching posterior margin of head; rostral groove closed posteriorly.

P r o n o t u m : Subtrapezoidal with much narrower anterior lobe, recessed lateral margins and subparallel posterior lobes, the lobes divided by a transverse impression. Anterolateral angles variable. Disc of anterior lobe with a median longitudinal furrow, flanked by ovate

flat callous and more prominent sublateral granulate elevations. Posterior lobe elevated toward posterior margin and higher than anterior lobe, its lateral margins raised.

Scutellum: Triangular, with a pair of large granules at basal angles which overlap pronotum. Lateral margins carinate; disc with a raised longitudinal ridge.

Hemelytra: Corium short, reaching anterior margin of Deltg III in macropterous forms, as long as scutellum in brachypterous species. Membrane covering tergal disc and 1/2 of tergite VII in macropterous, short and triangular in brachypterous specimens.

Abdomen: In macropterous and brachypterous forms with subparallel lateral margins, truncate posteriorly; PE-angles of Deltg II - VII raised and slightly produced. Tergal disc deeply punctured, fused to mediotergite (Mtg) I+II. Sublateral pair of glabrous impressions exposed. Venter with 2 ovate depressions on sternite VII of male which have a granulate bottom; spiracles II - VIII ventral and not visible from above. Male pygophore with a median rounded, posteriorly produced lobe.

Legs: Long and slender, all femora with a preapical spine; claws with long setiform pseudopulvilli.

Etymology: Néos = greek young, new; and *Artabanus* refers to its relationship to *Artabanus* and *Pseudartabanus*. Gender masculine.

Type species: *Pseudartabanus armatus* HEISS 1982 = *Scironocoris armatus* MONTEITH 1997.

Discussion: The presence of pit-like ovate depressions on sternites of male is also known in *Artabanus*, but there they are larger and single situated on sternites VI and VII each as shown in its type species *Artabanus bilobiceps* (LETHIERRY 1888) Fig. 12. Their function is unknown and seems, although present only in males, not directly related with mating, as the female is atop the male during copulation.

Due to this peculiar ventral structure, *Neartabanus* is related to *Artabanus* and *Pseudartabanus* rather than to the apparently closer *Scironocoris*. They may be separated by the characters mentioned before.

***Neartabanus armatus* (HEISS 1982) comb. nov. (Fig. 5, 9, 15a-d).**

Material examined: Holotype ♂ labelled „NE-India \ Assam, Khasi Distr. \ IV 78 leg. Fuchs“, coll. EH.

In addition to the original description, some further structural details can be given:

Abdomen: Tergite VII of male medially strongly raised for the reception of the globular pygophore. Parameres as Fig. 15a - d with two distinct transverse lamellate carinae on the inner face but lacking the file-like row of teeth of other Mezirinae.

Venter: Sternite VII of male enlarged and curved toward sternite VI, with 2 ovate depressed structures (which were concealed by dirt and (?) secretion).

Hemelytra: With distinct rudimentary shiny veins; corium actually shorter as in Fig. 8 of HEISS 1982: 195.

Distribution: NE-India (Assam).

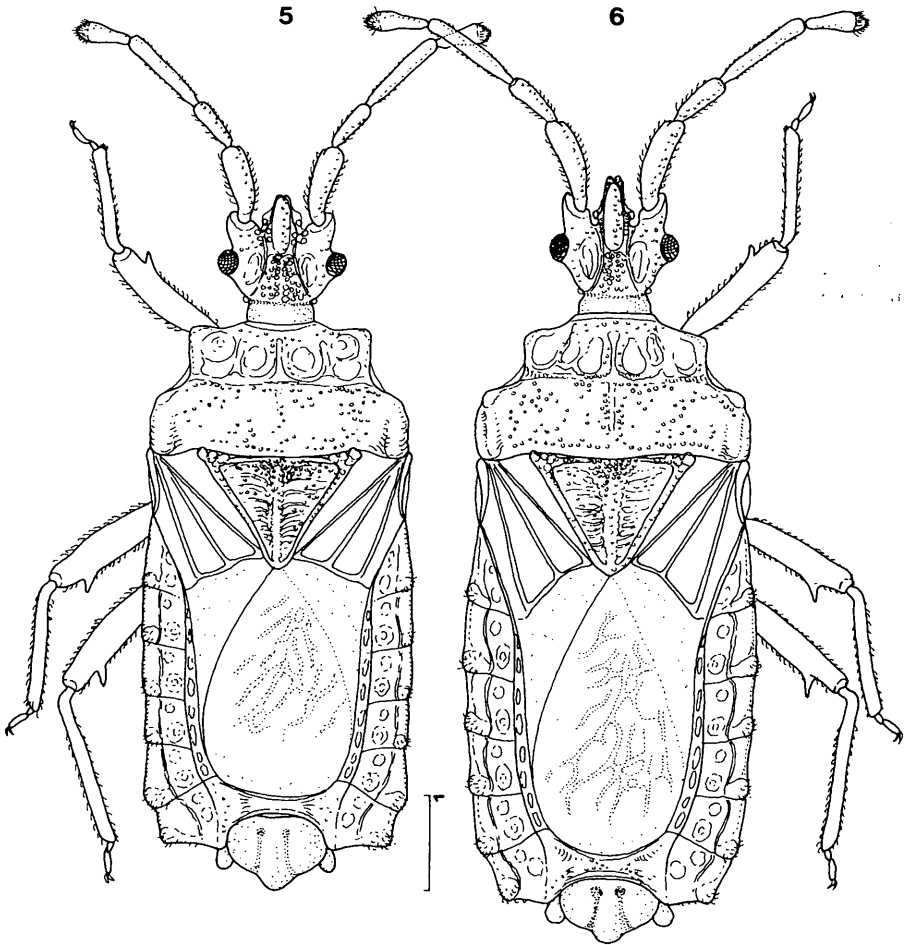


Fig. 5 - 6 *Neartabanus* species. 5 - *N. armatus* (HEISS), holotype male, dorsal view; 6 - *N. sexspinosus*

***Neartabanus sexspinosus* (BERGROTH 1892) comb. nov. (Fig. 6).**

Artabanus sexspinosus BERGROTH 1892: 710 (Burma)

Dimorphacantha sexspinosus USINGER & MATSUDA 1959: 256

Scironocoris sexspinosus MONTEITH 1997: 55

Material examined: ♂ labelled „Carin Cheba \ 900 - 1000 m \ L. Fea V XII - 88“ (printed); „Typus“ (later added label); „372“; „*sexspinosus* Bergr.“ (not Bergroth's handwriting); „*Art. sexspinosus*, typus!“ (handwr., obviously a museum label); „**Lectotype** *Artabanus sexspinosus* \ des. E.HEISS 1999“, in coll. MCSN (Museo Civico di Storia Naturale „Giacomo Doria“, Genoa, Italy).

There is no doubt as to the authenticity of the syntype specimen as it bears the labels mentioned in BERGROTH's original description (see HEISS 1989).

The description by BERGROTH was based on a female from „Palon in Pegu: m. septembri a. 1887“ and a male from „Carin Cheba: m. decembri a. 1888“. As the abovementioned male corresponds to the description and locality given by BERGROTH, it is designated here as Lectotype. Neither the female from Palon, nor any further specimens were available for study.

Examination of the lectotype has shown that it does not belong to *Scironocoris*, but shares all distinguishing characters of *Neartabanus* and is therefore transferred to this genus.

Redescription: Macropterous male. Medium-sized; body with sparse granulation; raised PE-angles of Deltg II - VII, legs and antennae with erect pubescence. Colour uniformly reddish-brown.

Head: Slightly wider than long (54/53). Clypeus short, apex embraced by rounded genal processes. Antenniferous tubercles short, with subparallel lateral margins and blunt apex. Antennae 2.5 x as long as width of head; relative length of segments I : II : III : IV = 42 : 25 : 43 : 25. Eyes produced laterally, postocular tubercles absent. Vertex with granulate elevation and 2 (1+1) ovate smooth callosities laterad.

Pronotum: 1.85 x as wide as long; anterior lobe 0.68 x width of posterior lobe; collar small but distinct; anterolateral angles obtuse, neither produced anteriorly nor laterally; lateral notch rounded and forming an obtuse angle. Lateral margins of posterior lobe subparallel and raised. Surface with coarse granulation, disc of anterior lobe with 4 (2+2) callous elevations, separated by a longitudinal sulcus.

Scutellum: Triangular, wider than long (74/50); base and lateral margins carinate; disc with a longitudinal granulate ridge, transversely rugose laterad.

Hemelytra: Corium short, its base reflexed laterally, reaching anterior margin of Deltg III. Membrane covering tergal plate and 1/2 raised tergite VII, with indistinct traces of veins.

Abdomen: Lateral margins subparallel; Deltg II to VI with a thin longitudinal carina and raised posterior margin, which is highest on Deltg II; Deltg VII raised medially, truncate posteriorly; PE-angles of Deltg II - VII barely protruding and beset with stiff hairs. Sublateral glabrous impressions exposed and placed on a longitudinal ridge delimiting the tergal disc. Venter with 2 (1+1) ovate depressions on sternite VII; metapleural scent gland canals slightly curved and gaping. All spiracles ventral, close to lateral margin but not visible from above.

Legs: Long and slender, all femora with a preapical spine.

Male genital structures: Pygophore much wider than long, ist median lobe rounded and produced posteriorly. The single specimen has not been dissected for the study of the parameres.

Measurements: Length 8.3 mm; pronotum width / length 2.95 / 1.60 mm; width of abdomen across tergite IV 3.25 mm.

Distribution: Myanmar [Burma] (Palon in Pegu Prov. and Carin¹/Cheba)

Discussion: *Neartabanus sexspinosus* is distinguished from the other species primarily by the shape of pronotum and the characters given in the key.

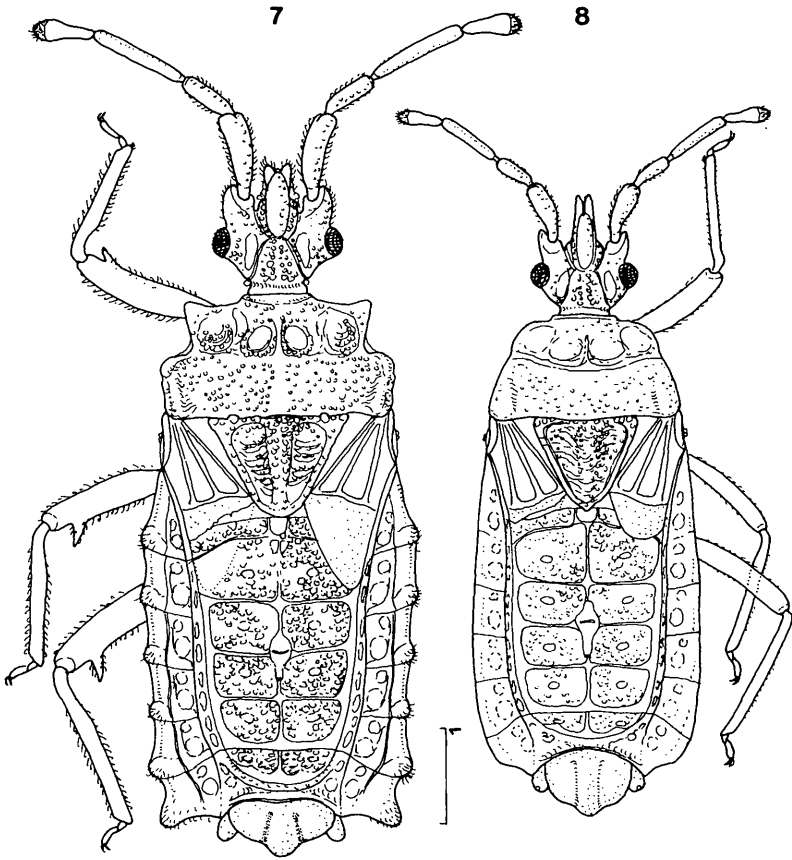


Fig. 7 - 8. 7 - *Neartabanus laoticus* sp. nov., holotype male, dorsal view; 8 - *Pseudartabanus „brachypterus“* KORMILEV, male (Puli, Taiwan), dorsal view. Scale = 1mm.

***Neartabanus laoticus* sp. nov. (Fig. 7, 10)**

H o l o t y p e : brachypterous ♂ labelled „SE Laos \ Thakhek \ 20 II 54 Rondon“, in coll. EH.

D i a g n o s i s : Medium-sized brachypterous species distinguished from *armatus* and *sexspinosus* by the shape of the pronotum, the projecting rounded lobes of Deltg VII, and the strongly transverse pygophore.

D e s c r i p t i o n : Holotype brachypterous ♂. Body with coarse granulation; PE-angles of Deltg II - VII, legs and antennae with erect pubescence. Visible tergal plate with deep flat punctures. Colour reddish-brown.

H e a d : About as wide as long (55/53). Clypeus short, genal processes with rounded apex produced over clypeus. Antenniferous tubercles short, lateral margins curved, apex blunt. Antennae 2.44 x as long as width of head; relative length of segments I : II : III : IV = 40 : 25 : 43 : 26. Eyes semi-inserted. Postocular portion of head without tubercles and strongly converging toward collar. Vertex with granulate elevation flanked by 2 (1+1) ovate smooth callosities.

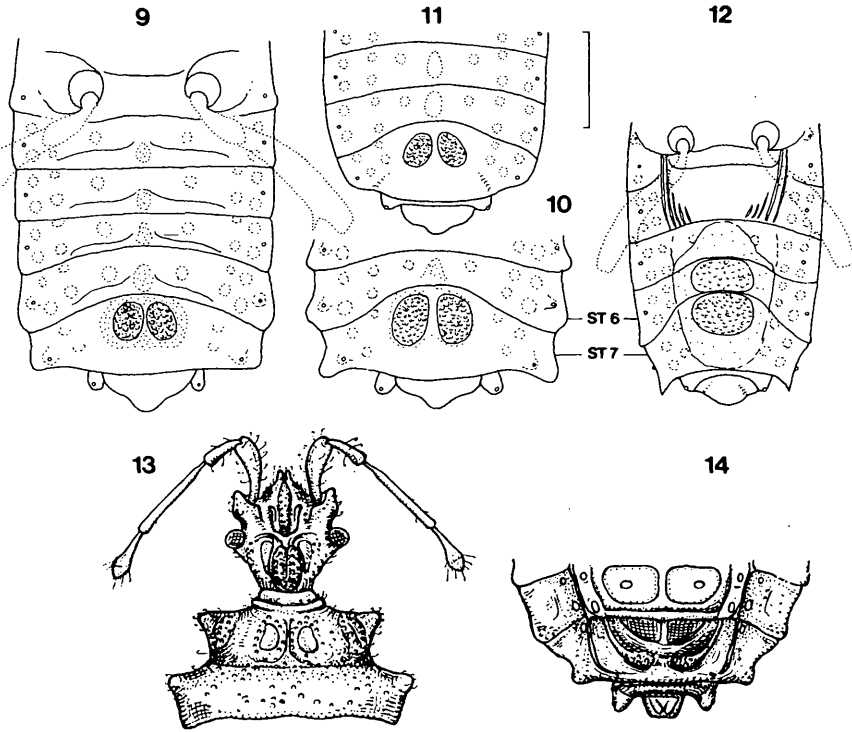


Fig. 9 - 14. *Neartabanus armatus*, holotype male, abdomen ventral view; 10 - *Neartabanus laoticus* sp. nov., holotype male, terminal segments, ventral view; 11 - *Pseudartabanus „brachypterus“*, male terminal segments, ventral view; 12 - *Artabanus bilobiceps* (LETHIERRY) from Sarawak, male abdomen, ventral view; 13 - „*Dimorphacantha*“ *brachyptera* LIU, holotype female, head and pronotum, dorsal view; 14 - ditto., terminal segments of abdomen, dorsal view (after LIU 1980). Abbreviations: ST 6, ST 7 - sternites 6 and 7. Scale = 1mm.

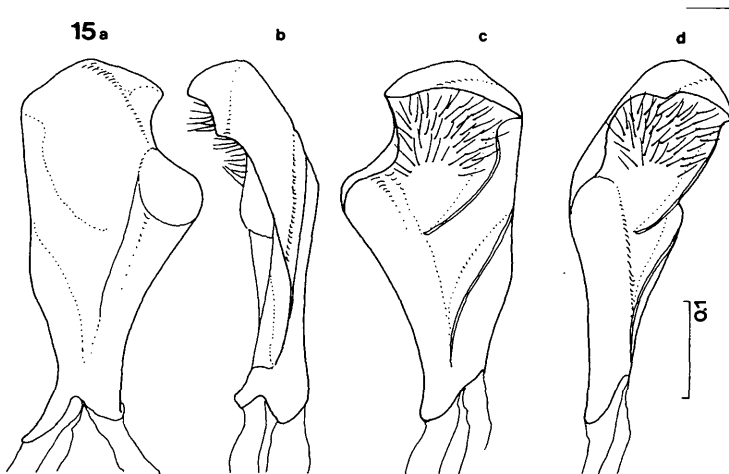


Fig. 15a - d *Neartabanus armatus*, right paramere of holotype in different positions. Scale = 0.1 mm.

P r o n o t u m : 1.85 x as wide as long; anterior lobe 0.82 x width of posterior lobe; collar distinct; anterolateral angles produced forward and laterally, apex raised; lateral notch deep, angularly rounded; lateral margins of elevated posterior lobe subparallel and raised. Surface with coarse granulation; disc of anterior lobe with 2 (1+1) smooth callosities separated by a longitudinal sulcus and 2 (1+1) granulate elevations laterad; disc of posterior lobe depressed medially along transverse impression.

S c u t e l l u m : Triangular with rounded apex; anterolateral angles thickened and raised, lateral borders carinate; disc elevated along granular median ridge, transversely rugose laterad.

H e m e l y t r a : Corium short, ist base reflexed laterally, reaching 1/2 Deltg II. Membrane reduced to triangular vestiges, which reach 1/2 Deltg. III.

A b d o m e n : Lateral margins widened from pronotum to Deltg II, then gradually narrowing toward Deltg VII, truncate posteriorly. Deltg II - VI with a longitudinal carina and raised posterior margins, PE-angles slightly producing and beset with stiff hairs. Tergite VII raised medially, its PE-angles rounded and produced laterally and posteriorly. Sublateral glabrous impressions exposed on a longitudinal ridge. Tergal plate deeply punctured. Venter with 2 (1+1) ovate depressions on sternite VII. All spiracles ventral, placed on tubercles, not visible from above. Metapleural scent gland canal as in *sexspinus*.

L e g s : Long, with distinct preapical spines on each femur.

M a l e g e n i t a l i c s t r u c t u r e s : Pygophore transverse, twice as wide as long. The single specimen has not been dissected for the study of the parameres.

M e a s u r e m e n t s : Length 7.6 mm; pronotum width / length 2.50 / 1.35 mm; width of abdomen across tergite III 3.0, Tg IV 2.85, Tg VI 2.60 mm.

E t y m o l o g y : Refers to the country where it was discovered.

D i s t r i b u t i o n : SE Laos (Thakhek).

D i s c u s s i o n : Due to the shape of the pronotum and body structures it can be concluded, that *Neartabanus laoticus* is not the brachypterous form of one of the beforementioned species.

Its pronotal shape seems however close to that of *Dimorphacantha* (= *Scironocoris* sensu MONTEITH) *brachyptera* LIU 1980 from SE-China, Yunnan (Fig. 13, 14), which was described from a brachypterous female 8.64 mm long and very probably belongs to *Neartabanus* too, and here is tentatively placed in this genus. *N. laoticus* differs from the latter by the anterolateral angles of the pronotum beeing produced anteriorly and laterally (only laterally in *brachyptera*), by the lateral margin of posterior lobe of pronotum beeing subparallel (distinctly produced anterolaterally) and by the shorter antennal segment III = 1.78 x II (2.0 x).

The known recdrds of species presently assigned to *Neartabanus* seem to follow the southern slopes of the Himalayan mountain range from India through Myanmar [Burma] and Laos to Southern China .

Key to the species of *Neartabanus*

- 1 (2) Head distinctly wider than long; anterolateral angles of pronotum forming a right angle; antennae shorter, about 2.3 x as long as width of head (Fig. 5); NE-India *armatus* (HEISS 1982)
- 2 (1) Head about as long as width or slightly wider; anterolateral angles of pronotum not forming a right angle; antennae longer (Fig. 6-7) 3
- 3 (4) Macropterous; anterolateral angles of pronotum obtuse, neither produced forward nor laterally; antennae about 2.45 x as long as width of head; Burma *sexspinosus* (BERGROTH 1892)
- 4 (3) Brachypterous; anterolateral angles of pronotum produced laterally, antennae longer 5
- 5 (6) Antennae about 2.5 x as width of head, segment III 1.78 x as long as II; lateral margins of posterior pronotal lobe subparallel; SE Laos ... *laoticus* sp. nov.
- 6 (5) Antennae about 2.56 x as width of head, segment III 2.0 x as long as II; lateral margins of posterior pronotal lobe produced anterolaterally; SE China
..... ? *brachypterus* (LIU 1980)

***Pseudartabanus brachypterus* KORMILEV 1971 (Fig. 8, 11)**

Pseudartabanus brachypterus KORMILEV 1971: 133 (Fig. 192-193)

Pseudoartabanus (*lapsus*) KORMILEV & FROESCHNER 1987: 188 (catalogued).

The genus *Pseudartabanus* ESAKI & MATSUDA 1952 was based on *P. formosanus* from Taiwan. It has been compared with *Artabanus* STÅL, but differs from the latter by lacking stridulatory structures and preapical spines on all femora and by having spiracles VII ventral not lateral.

A second species, *P. brachypterus*, with reduced membrane was described by KORMILEV 1971: 133 from a single male from Taiwan, Puli, 20 XI 1954 Chin Hwei coll.

In the collection of the author are a ♂ and ♀ from the same locality, identified and labelled by KORMILEV in 1968 as „*Pseudartabanus formosanus*“, which at that time he regarded obviously as the brachypterous form of the macropterous type species.

The differences between *formosanus* and *brachypterus* mentioned by KORMILEV as „slightly smaller, posterior lobe of pronotum abbreviated (brachypterism!), reduced hemelytra and hind wings absent“ are only modifications due to alary reduction and *P. brachypterus* is regarded as a synonym. Therefore

Pseudartabanus formosanus ESAKI & MATSUDA = *P. brachypterus* KORMILEV 1971
syn. nov.

Of the 3 species listed under *Pseuartabanus* by KORMILEV & FROESCHNER 1987, *armatus* HEISS is now transferred to *Neartabanus*; *brachypterus* KORMILEV is now regarded as a synonym of *formosanus* ESAKI & MATSUDA, which remains the only species of the genus known to date from Taiwan only.

M e a s u r e m e n t s of the material examined (♂ ♀): Length 6.8 and 8.5 mm; pronotum width / length 2.02 / 1.15 and 2.55 / 1.50 mm; width of abdomen across tergite IV 2.4 and

3.3 mm; relative length of antennal segments I : II : III : IV = 29 : 17 : 31 : 20 and 36 : 21 : 39 : 20; ratio length of antennae / width of head 2.10 and 2.03.

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REFERENCES

- BERGROTH E. 1892: Viaggio di Leonardo Fea in Birmania e regioni vicine XLVII. Commentarius secundus de Aradidis in Burma et Tenasserim a L. Fea collectis. — *Annali Mus. Civ. Stor. Nat. Genova*, ser. 2, **12** (=32): 710-717.
- ESAKI T. & R. MATSUDA 1952: Description of a New Genus and Species of Dysodiidae from Formosa (Hemiptera). — *Mushi* **23**: 65-67.
- HEISS E. 1982: New Aradidae from Andaman Islands, Northern India and Java (Heteroptera). — *Boll. Mus. Stor. Nat. Verona* **8** (1981): 185-204.
- HEISS E. 1989: Types of Aradidae (Heteroptera) in the Museo Civico di Storia Naturale „Giacomo Doria“ Genova, I. — *Annali Mus. Civ. Stor. Nat. Genova* **87**: 325-371.
- HEISS E. & L. HOBERLANDT 1985: Aradidae (Hemiptera, Heteroptera) von Sri Lanka. — *Entomol. Scand.*, Supplement **30**: 31-35.
- KORMILEV N. A. 1957a: Notes on Aradidae from the Eastern Hemisphere, XI (Hemiptera). On some apterous Mezirinae from New Guinea. — *Philippine Journal of Science* **85** (1956): 389-403.
- KORMILEV N. A. 1957b: Notes on Aradidae from the Eastern Hemisphere (Hemiptera). XIII. On some Aradidae in the Drake-Collection. — *Quart. Journ. Taiwan Mus.* **10**: 37-46.
- KORMILEV N. A. 1971: Mezirinae of the Oriental Region and South Pacific (Hemiptera-Heteroptera: Aradidae). — *Pacific Insects Monograph* **26**: 1-165.
- KORMILEV N. A. & R. C. FROESCHNER 1987: Flat bugs of the World. A synonymic list. (Heteroptera: Aradidae). — *Entomography* **5**: 1-246.
- LETHIERRY L. 1888: Liste des Hémiptères recueillies a Sumatra et dans l' ile Nias par M. E. Modigliani. — *Annali Mus. Civ. Stor. Nat. Genova*, ser. 2, **6**: 460-470.
- LIU S. L. 1980: New species of Mezirinae from China (Hemiptera-Heteroptera: Aradidae). — *Acta Zootaxon. Sinica* **5** (2): 175-184.
- MONTEITH G. B. 1969: A remarkable case of alary dimorphism in the Aradidae (Hemiptera) with a generic synonymy and a new species. - *Journ. Austral. Ent. Soc.* **8**: 87-94.
- MONTEITH G. B. 1997: Revision of the Australian Flat Bugs of the Subfamily Mezirinae (Insecta: Hemiptera: Aradidae). — *Memoirs Queensland Mus.* **41** (1): 1-169.
- OSHANIN B. F. 1908: Verzeichnis der paläarktischen Hemipteren mit besonderer Berücksichtigung ihrer Verteilung im Russischen Reiche. **1** (2): 395-586.
- STÅL C. 1865: *Hemiptera africana* 3: 1-200.
- USINGER R. L. & R. MATSUDA 1959: *Classification of the Aradidae*. London: British Museum, 410 pp.

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