#### ENTOMOLOGICAL REVIEW

### A translation of Entomologicheskoye Obozreniye

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# REVISION OF Microacmaeodera COBOS (COLEOPTERA, BUPRESTIDAE)\*

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The taxon Microacmaeodera was proposed as a subgenus by Cobos (1966) for the sole species Acmaeodera longicornis Cobos, known when it was described only from the holotype. This species possesses extremely long antennae while its body is small (Fig. 24). On the basis of the genitalic structures of A. longicornis we (Volkovich, 1979) elevated Microacmaeodera to the status of genus. Subsequent to this we received 2 spms. of a new species close to M. longicornis that were collected by W. Wittmer and C. Holzschuh in the Himalayas. Study of material in the British Museum of Natural History (BM), the Musée Nationale d'Histoire Naturelle in Paris (MNHNP), and the National Museum in Praha (NMP; the Obenberger collection) revealed that in spite of differences, especially in having normal antennal structure, Acmaeodera belli Kerremans and A. aruensis Théry were also close to M. longicornis and that for them a new subgenus of Microacmaeodera should be erected.

I consider it a pleasure to offer sincere thanks to O. N. Kabakova (Leningrad), S. Bily (NMP), C. M. F. von Hayek (BM), A. Descarpentries (MNHNP), H. Mühle (München), and C. Holzschuh (Wien), who kindly loaned material for study, as well as artist N. N. Fuzeev, who prepared the figures.

Genus MICROACMAEODERA Cobos, 1966

Cobos, 1966: 310 (Acmaeodera subgenus); Volkovich, 1979: 345.

Body 2.9-5.6 mm long, dorsally convex (Fig. 2); black, sometimes with metallic sheen, pattern lacking. Clypeus not reduced (Fig. 5-7). Antenna normal (subgenus Squamicroacmaeodera, n.) or greatly elongated, in  $\sigma$  sometimes reaching half of body length (subgenus Microacmaeodera) (Fig. 8-10). Pronotum without basal depression, lateral cavities practically imperceptible, disk with simple punctation; prothoracic hypomera with projections, mesepimera narrow but distinct. Elytral epipleura with shallow but distinct incisure behind humeri and more or less of curve at level of hindcoxa (Fig. 2). Surface with short hairs and setae or narrow scales. Hindcoxa sometimes with lateral tooth. Claws narrow, normal or broadened (Fig. 11), with small median tooth. Apophyses of 9th tergite fused (Fig. 17, 23, 33). Penis strongly modified, lamina sometimes divided (Fig. 13, 19, 32). Ovipositor of cylindrical type, elongate (Fig. 25-27).

Type species - Acmaeodera longicornis Cobos, 1966.

Distribution. Indomalayan Realm, SE Palearctic.

Life History. Unknown; probably associated with woody plants.

The genus differs from other Acmaeoderini in lacking the basal pronotal depressions and in having a special aedeagal structure, particularly in the divided lamina of the penis (M. aruensis [Théry], M. wittmeri sp. n.). The small body size

should be mentioned as a supplementary character together with the black color and the backwardly tapering of the elytra almost from the middle in the new subgenus Squamicroacmaeodera and the strongly elongated antennae of the subgenus Microacmaeodera.

#### KEY TO SPECIES AND SUBGENERA OF MICROACMAEODERA

- 2 (3). Front parallel-sided, not widening posteriorly, with reticulate sculpture of umbilicate punctations with excentric dots. Punctate striae of elytra missing only in posterior half, anteriorly fusing with punctations of intervals. Hindcoxae with large rectangular lateral tooth. Abdomen, except laterally on lst sternite, with simple or rasplike punctations . . . M. belli (Kerremans).

#### Subgenus SQUAMICROACMAEODERA Volkovitsh, n.

Body broad and robust. Head, sides of pronotum, underside of thorax, and at most sternite I of abdomen with umbilicate punctation, forming ocellate or reticulate sculpture; dorsum with narrow scales. Clypeus relatively wide, with narrow, shallow median emargination (Fig. 5). Antenna normal, in \( \sigma\) more than twice as long as eye height, shorter in \( \frac{2}{3}\). Elytral intervals more than twice as wide as punctate striae. Aedeagus (M. aruensis) strongly elongate, lamina of penis double (Fig. 19).

Type species -- Acmaeodera belli Kerremans, 1893.

Distribution. Indostan, Malayan Archipelago.

Life history unknown.

1. Microacmaeodera (Squamicroacmaeodera) belli (Kerremans, 1893), comb. n.

<sup>\*</sup>Originally published in Entomologicheskoye Obozreniye, No. 1, 1986, pp. 126-137.

Kerremans, 1893: 338 (Acmaeodera); 1906: 260 (Acmaeodera); Obenberger, 1926:

Body small, broad, robust, markedly curved dorsally; black with bluish and bronzy sheen; covered with narrow hyaline scales.

Head broad, hardly projecting; front weakly depressed medially, straight margined, nearly parallel-sided; vertex 1.92 times as wide as transverse diameter of eye and 1.05 times as wide as front above antennal depressions. Front with reticulate sculpture formed by rounded, superficial, umbilicate punctation with inconspicuous granules and eccentrically placed dots. Antenna short, broadened from 5th segment on (?), 1.4 times as long as height of eye; 2nd segment oval; 3rd thickened, conical; 4th as long as 3rd, distinctly triangularly broadened apically, but markedly less so than 5th 5th-10th rounded triangularly; 11th irregularly rounded.

Pronotum evenly rounded, almost globular; width at base 1.33 times its length; sides weakly arcuate, more strongly convergent anteriorly than posteriorly; anterior margin strongly forwardly arcuate; basal margin straight. Lateral keel thick, distinct, entire, weakly downcurved anteriorly. Lateral borders of pronotum with reticulate-rugose sculpture of extensive umbilicate punctures without granules, with large dots; rugae thick, inconspicuous; toward disk margins of punctations decreasing and dots enlarging until in disk becoming simply dotted. Pubescence consisting of decumbent white scales hardly exceeding diameter of punctations. Anterior margin of prothorax straight, bordered by deep groove; sculpture consisting of small, deep, often umbilicate punctations. Sculpture of metathorax formed of large, deep, umbilicate punctations; that of hindcoxa of small umbilicate punctations. Hypomeres ground.

Elytra 2.29 times as long as basal width; laterally slightly divergent to middle, then converging in almost straight lines to narrowly rounded, hardly truncated tips. Denticles of epipleura small, hardly noticeable just before tip. Punctations of striae oval, shallow, coalescing in posterior half of elytra; in anterior half fusing with those of intervals, forming evenly punctate sculpture. Intervals flat, uniform, 2.5-4.0 times as wide as striae, covered with large, superficial, mostly uniseriate punctations on smooth shining background and thin, setiform, hyaline uniseriate scales as long as or slightly shorter than width of intervals.

Legs black, hindcoxae widened laterally, with deep lateral emargination and large, rectangular tooth. Tibiae slightly widened apically. Femora with white hairs and scales. Tarsi in holotype missing.

Abdomen black, sides of lst sternite reticulately sculptured with large umbilicate punctations turned toward meson and rasplike, then with simply punctate sculpture; pubescence consisting of decumbent, thin, hairlike scales. Anal sternite of proadly rounded, slightly truncate at tip, without depression.

Male unknown.

Ovipositor cylindrical, elongate, 3 times as long as widened part (Fig. 27).

Body 4.2 mm long, 1.4 mm wide.

<u>Material.</u> Holotype: <sup>2</sup>, "Kanara, Andrewes/Type/Belli Kerrem., Type/Kerremans

<u>Distribution.</u> India. Precise locality unknown; the historical province of Kanara includes the western part of the modern States of Karnataka and Kerala (Fig. 34).

2. Microacmaeodera (Squamicroacmaeodera) aruensis (Théry, 1922), comb. n. (Fig. 1).



Fig. 1. Microacmaeodera (Squamicroacmaeodera) aruensis (Théry). ? paralectotype.

Body small, broad, robust, convex, with marked dorsal curvature (Fig. 2), black; covered with thin hyaline scales.

Head broad; front with longitudinal depression, sides diverging to vertex or nearly parallel; vertex 2.13 times transverse diameter of eye and 1.10 times width of front above antennal depressions\*. Front with ocellate sculpture formed of umbilicate surface punctations with inconspicuous granules and central dots, middle of front with finer punctation and intervals with traces of shagreening. Antenna widened from 5th segment on, 1.59 times as long as height of eye  $(\sigma)$ ; 2nd segment oval, thickened; 3rd and 4th segments similar, widened apically; 5th-10th segments foliate; llth segment thomboidal.

Pronotum evenly convex, a little wider than long; basal width 1.44 times its length; greatest width behind middle; sides regularly arcuate, strongly converging anteriorly to greater degree than posteriorly; anterior margin angularly projecting; basal margin straight. Lateral carina not distinct, markedly developed only at hindcorners. Sides with reticulate sculpture, in places reticulate-rugose with superficial, strongly extended, sometimes with longitudinally fused umbilicate punctations with rough bottoms lacking granules and with small punctations; rugae fine and indistinct; punctations becoming larger discally and centrally covering disk with simple punctations. Pubescence consisting of short decumbent white scales not longer than diameter of punctations. Anterior prothoracic margin slightly arcuately truncate, slightly short of attaining forecorner and bordered with groove; prothoracic sculpture consisting of small deep umbilicate punctations. Metathorax and hind-coxae with deep round umbilicate punctations. Projection of hypomere with abundant round umbilicate punctations.

Elytra 2.12 times as long as wide at base, widening slightly to middle, posteriorly converging in nearly straight lines to separately rounded tips. Denticles in posterior third of epipleura small, inconspicuous. Punctations of striae fine, oval, coalescent, in posterior half forming grooves. Intervals similar, flat, 3-4

<sup>\*</sup>In most of the specimens examined, the head was deeply withdrawn into the prothorax, making it difficult to measure; the indices are therefore cited only from the lectotype.

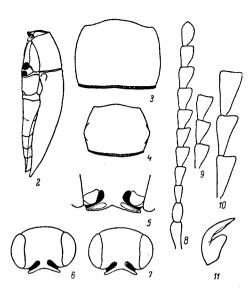


Fig. 2-11. Microacmaeodera Cobos. 2, 5, 11) M. aruensis (Théry) - (2) profile, (5) clypeus, (11) claws; 3, 7, 9, 10) M. longicornis (Cobos) - (3) pronotum, (7) head in anterior view, (9) median segments of antenna of ?, (10) same of of; 4, 6, 8) M. wittmeri sp. n. - (4) pronotum, (6) head in anterior view, (8) antenna of ?.

times as wide as striae, with large superficial uniseriate punctations on smooth and shining background and with fine hairlike hyaline scales approximately half as long as width of interval.

Legs black; hindcoxae with hardly curved hindmargin, without lateral tooth. Tibiae weakly broadened apically, covered with inconspicuous hairs. Plantar brush well developed at all tarsal segments, larger toward tip. Claws short, broad with large blunt tooth (Fig. 11).

Abdomen wholly black, covered completely with reticulate sculpture. Anal sternite truncate and hardly concave apically ( $\sigma$ ).

Male (Fig. 18-23). Aedeagus externally somewhat similar to that of species of Acmaeoderella; lamina divided, consisting of 2 narrow sclerites, chamber of seminal duct with accessory sclerite.

Female unknown.

Length of body 5.5-5.7 mm, width 2.0-2.1 mm.

Material. Lectotype (by present designation): \( \sigma, \) "Ile Aru, Schneider / Type / Museum Paris, 1935, coll. A. Théry / Acmaeodera aruensis Théry, Type unique" (MNHNP). Paralectotype: \( \sigma, \) "Cotype / Ile Aru / Acmaeodera aruensis Théry, Type, Théry det. / ex coll. A. Théry, BM 1923-364" (BM). ? Paralectotype: \( \sigma, \) "Arou Isl., ex Théry / Acmaeodera aruensis Théry, comp. au type, Théry det." (NMP). It is difficult to determine from the original description the number of typical specimens, and we therefore, in spite of the designation "Type unique" on the specimen from the Théry collection (MNHNP), consider it a lectotype. The status of the specimen in the Obenberger collection (NMP) is not entirely clear.

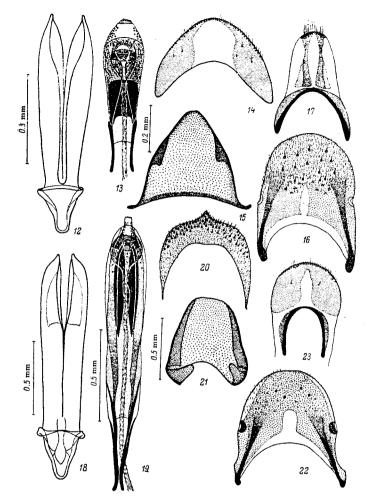


Fig. 12-23. Microacmaeodera Cobos, details of a genitalia. 12-17) M. longicornis (Cobos): 12 - tegmen, 13 - penis, 14 - 8th sternite, 15 - 9th sternite, 16 - 7th tergite, 17 - 9th tergite; 18-23) M. aruensis (Théry): 18 - tegmen, 19 - penis, 20 - 8th sternite, 21 - 9th sternite, 22 - 8th tergite, 23 - 9th tergite (paralectotype).

<u>Distribution</u>. In the original description are cited "Ile Aru M. Marapok, Borneo, Brunei, Borneo", which contradicts "Type unique" on the lectotype. Nor is it entirely comprehensible what is meant by the series of listed localities, especially the repeated mention of Borneo (Kalimantan), inasmuch as the island of Aru is in another archipelago and the other locality, Mt. Marapok, is in the SW part of the Kroker Mts. in Brunei Territory. All specimens we have seen are from Aru Island, and the occurrence of the species on Kalimantan needs confirmation.

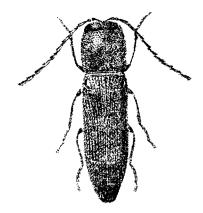


Fig. 24. Microacmaeodera longicornis Cobos, holotype.

#### Subgenus MICROACMAEODERA Cobos

Body strongly elongated, narrow; head, pronotum, thoracic sternum, and venter with simple punctate sculpture; dorsum with short hairs and setae. Clypeus narrow, with broad shallow median emargination (Fig. 6-7). Antennae strongly elongated, in ? more than twice as long as height of eye, in  $\sigma$  of M. longicornis with tip reaching midlength of body (Fig. 8-10, 24, 30). Elytral intervals narrow, equal to or more than width of striae. Aedeagus relatively short, strongly modified (Fig. 12-13, 31-32).

Type species - Acmaeodera longicornis Cobos, 1966.

Distribution. Western Himalayas.

Mode of life. M. longicornis lives on oak.

3. Microacmaeodera (s. str.) longicornis (Cobos, 1966) (Fig. 24).

Cobos, 1966: 310 (Acmaeodera); Volkovich, 1979: 345.

Body small, elongate; with strong dorsal curvature; black with bluish sheen; covered with short hairs; antenna very long, in  $\sigma$  reaching midlength of body.

Head broad, convex; front weakly flattened in middle, parallel-sided or scarcely broader at vertex (Fig. 7); vertex 1.75-2.10 times as wide as transverse diameter of eye and 1.0-1.7 times width above antennal depressions. Front with simple punctation of very deep numerous punctations, intervals shining and with very short, decumbent whitish and brownish hairs. Antenna exceptionally long, 5.18-5.31 ( $\sigma$ ) or 2.88-3.33 ( $\gamma$ ) times as long as height of eye; broadened from 3rd ( $\sigma$ ) or 4th ( $\gamma$ ) segment on; segments considerably longer than wide (Fig. 9-10).

Pronotum evenly convex, nearly globular (Fig. 3); basal width 1.2-1.3 times its length; sides weakly arcuate, sometimes almost straight, without projections, greatest width in posterior 1/3; anterior margin scarcely arcuately curved forwardly; basal margin straight. Lateral carina distinct, entire. Sculpture punctate with large, deep simple punctations evenly dispersed over surface of pronotum. Pubescence of very short, decumbent, poorly noticeable, light-colored hairs. Anterior margin of prothorax hardly appreciably emarginate, nearly straight, bordered with wide groove reaching forecorner; surface with numerous simple punctations; hypomere with strong simple punctations.

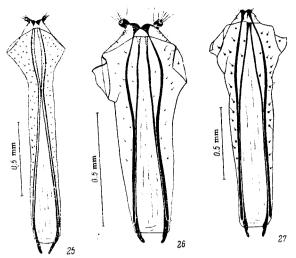


Fig. 25-27. Microacmaeodera Cobos, ovipositors. 25) M. longicornis (Cobos); 26) M. wittmeri sp. n., paratype; 27) M. belli (Kerr.), holotype, styli broken off.

Elytra 2.44-2.9 times as long as basal width; sides gently divergent at humeri, then almost parallel or hardly divergent approximately to middle or apical 1/3, and finally evenly convergent to rather broadly rounded tip. Strial punctations large, oval, almost coalescent, weakly depressed groovewise. Intervals of similar width, equal to or 1.5-2.0 times width of striae, flattened or hardly convex; covered with small, distinct, nearly uniseriate punctations on smooth and shining background and short, posteriorly inclinate whitish hairs hardly longer than width of interval.

Legs dark brown, femora sometimes blackish. Hindcoxal margin straight, slightly emarginate laterally, barely recurved, non-denticulate. Tibiae slender, hardly at all widened apically, slightly curved. Legs with whitish hairs and bristles, hind tibia with sparse row of long setae along outer margin. Hindbasitarsus as long as following 2-3 segments; claw segment long, slender, equal to preceding 3 segments; plantar brush hardly developed on 1st 3 segments; claws long, slender, curved, with weak median tooth.

Abdomen black, with simple, somewhat effaced punctation and short yellowish hairs. Anal sternite narrowly rounded apically in both sexes, in \$ scarcely blunted.

Male (Fig. 12-17) with 8th sternite rounded along anterior margin, lacking tooth, with unsclerotized median portion; 9th tergite very narrow. Aedeagus externally resembling species of subgenus Acmaeotethya of genus Acmaeodera, but penis strongly modified, not having structures analogous to those of other species of the tribe Acmaeoderini. Lamina nearly quadrate, combined with bases of apodemes.

Female (Fig. 25, 28). Ovipositor cylindrical, strongly elongate, total length 5 times widened basal part.

Length of body 2.9-4.2 mm, width 0.9-1.2 mm.

Material. Holotype, o, "Kamdesch, 2000 m, Bashgultal, Nuristan, 16.VII.52, J. Klapperich / Holotypus, A. Cobos / Acmaeodera (Klapperichia) longicornis sp. nov., Holotypus, A. Cobos det., 1. 965" (G. Mühle collection, München). Supplementary

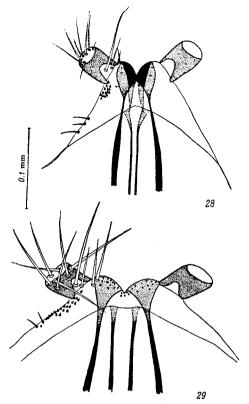


Fig. 28, 29. Microacmaeodera Cobos, tip of ovipositor. 28) M. longicornis (Cobos); 29) M. wittmeri sp. n., paratype.

material: 3 spms., Afghanistan, SW Čapa-Dara, Nuristan, 1800 m, 17.VII.1971, O. H. Kabakov; 2 spms., Afghanistan, W Waygal, Nuristan, 2200 m, 11.VII.1972, O. H. Kabakov; 2 spms., Pakistan, Swat, Miandam, 1900-2200 m, 20-21.V.1978, leg. G. Holzschuh, "1.VI.1979, ex Quercus"; 1 spm., India, Jammu u. Kashmir, Jammu, District Kishtwar, Ekala-Sonder, 1700-2000 m, 8.VII.1980, leg. C. Holzschuh.

 $\underline{\text{Distribution.}}$  Afghanistan: Kumar; Pakistan: SW border provinces; India: Jammu and Kashmir.

 $\underline{\text{Mode of life.}}$  As attested by 0. N. Kabakov, it is limited to broadleaf forests of Himalayan type. It lives on oak (G. Holzschuh).

4. Microacmaeodera (s. str.) wittmeri Volkovitsh, sp. n. (Fig. 30).

Body small, strongly elongate, narrow, weakly convex, with distinct dorsal curvature; bronzy black, covered with yellowish and brownish hairs; antenna more than twice as long as height of eye.

Head broad, convex; front weakly longitudinally flattened in lower half, margins weakly convergent to vertex, weakly arcuate (Fig. 6). Width of vertex 2.0-2.8

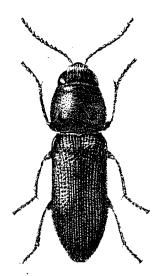


Fig. 30. Microacmaeodera wittmeri sp. n. holotype.

times transverse diameter of eye and 0.96-0.97 width of front above antennal depressions. Front with large, numerous, deep, simple punctations; intervals shining and with very short, decumbent, yellowish and brown hairs. Antenna 3.54 ( $\sigma$ ) or 2.25 (?) times as long as height of eye, widened from 4th segment on; length of segments in  $\sigma$  1.5 times their width, in ? a little more than their width (Fig. 8).

Pronotum convex, almost globular, at base 1.07-1.1 times as wide as long; sides weakly arcuate, slightly flattened in middle, and with nodular projections behind middle (Fig. 4); base weakly transversely flattened; anterior margin hardly perceptibly forwardly arcuate, basal margin straight; lateral carina distinct, entire. Sculpture punctate with large, nearly effaced simple punctations, evenly dispersed over surface, slightly rasplike discally. Pubescence of short decumbent yellowish and nearly brownish hairs. Anterior margin of prothorax hardly noticeably arcuately concave, nearly straight, bordered by slender groove reaching forecorner. Thoracic sternum with fine, effaced, simple punctations; hypomere with large simple punctations.

Elytra 2.48-2.74 times as long as basal width; sides slightly widened at humeri, then nearly parallel, and before posterior 1/3 coverging to rather broadly rounded tip; epipleura practically without denticles apically. Striae with large, oval, almost non-coalescent punctations and weakly depressed groovewise; intervals similar, equal to or 1.5-2.0 times width of striae, flattened and covered with small, distinct, almost uniseriate punctations on barely rugulose, shining background and short, backwardly inclined brown hairs not as long as width of intervals.

Legs bronzy black; hindcoxae with straight margins, slightly emarginate laterally, barely reflexed, without tooth. Tibiae slender, hardly widened apically, weakly curved. Legs with white hairs and setae; hindtibia with row of long, sparse setae along outer edge. Hindbasitarsus as long as 2nd segment, somewhat longer than 3rd and 4th; claw segment slender, nearly as long as 2 basal segments together. Plantar brush developed on ultimate 3 segments, increasing toward tip of tarsus. Claws long, slender, curved, with weak median tooth.

Abdomen bronzy black, with simple scattered punctations, sparser in middle,

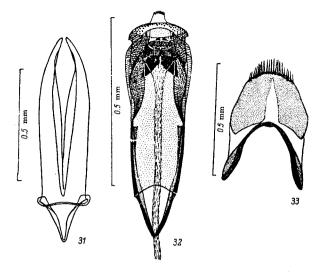


Fig. 31-33. Microacmaeodera wittmeri sp. n., o genitalia (holotype). 31) tegmen; 32) penis; 33) 9th tergite.

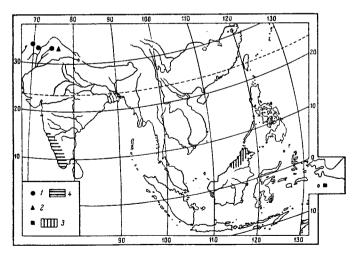


Fig. 34. Species ranges of Microacmaeodera Cobos. 1) M. longicornis (Cobos); 2) M. wittmeri sp. n.; 3) M. aruensis (Théry); 4) M. belli (Kerr.).

and short whitish hairs. Anal sternite of  $\hat{y}$  broadly rounded, scarcely projecting at tip.

Male (Fig. 31-33) with 9th tergite unmodified (Fig. 33), structure of 8th tergite and sternite could not be examined. Aedeagus weakly elongate; tegmen strongly tapered in basal part (Fig. 31); penis (Fig. 32) strongly modified, with basally conjoined double lamina and strongly anteriorly flattened apodeme.

Female (Fig. 26, 29) with ovipositor cylindrical, relatively short, total length 3 times that of broadened basal part.

Length of body 4.4-5.3 mm, width 1.1-1.4 mm.

Material. Holotype o, India, Jammu u. Kashmir, District Kishtwar, Kishtwar Umg. (= vicinity), 1500 m, 4-6.VII.1980, leg. G. Holzschuh (Holzschuh collection). Paratype ?, Ekala-Sonder, 1700-2100 m, Jammu, W. Wittmer.

Distribution. India: Jammu and Kashmir.

#### DISTRIBUTION AND RELATIONSHIPS OF MICROACMAEODERA SPECIES

The Acmaeoderini of Southeastern Asia have been very poorly studied. Due to insufficiency of material at present, it is extremely difficult not only to cite precisely the diagnostic characters of the genera but also their interrelationships. Future discoveries may allow this matter to be more fully elucidated.

In several characters, viz., the elongation of the antennae, the narrow clypeus, simple body punctation, and the greatly modified penis, the subgenus Microacmaeodera may be considered more derived than the new subgenus Squamicroacmaeodera, although this latter possesses such specialized traits as scales instead of hairs on the body. In the presence of incisions in the elytral epipleura, the body shape, the narrow mesepimera, and some other characters, the subgenus Microacmaeodera may be approaching the Acmaeotethya group of subgenera of Acmaeodera (Acmaeotethya. Cobosiella, Paracmaeodera, Rugacmaeodera and Ptychomus), distributed exclusively in the Old World. It may be that Microacmaeodera and the mentioned taxa originated from the general ancestor of the group. The subgenus Acmaeotethya is most widely distributed, being found in the Indomalayan, Palearctic and Ethiopian Realms; the subgenera Paracmaeodera, Rugacmaeodera and Ptychomus are restricted to the Ethiopian, although individual species appear in the southern parts of the Palearctic; and the subgenera Cobosiella and Microacmaeodera (Fig. 34) and predominantly in the Indomalayan, but some species appear in the NW within the western Palearctic. This part of the generic range of Microacmaeodera includes the most derived subgenus Microacmaeodera and especially the most derived species M. longicornis (to the western outliers of the Himalayas in eastern Afghanistan), while the more primitive subgenus Squamicroacmaeodera occurs in the south and extreme SE of the Indomalayan (M. aruensis, the most eastern representative of the tribe Acmaeoderini in the Old World), which argues for placing the autochthonous origin of the genus in Southeastern Asia.

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## A NEW SPECIES OF Nematus (HYMENOPTERA, TENTHREDINIDAE) FROM YAKUTIA\*

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The new species of sawfly Nematus egregius is described from material collected over a period of several years in the valley of the Middle Lena (Yakutsk, Khaptagay, Oktemtsy, Pokrovsk and Kharyyalakh Island). The adult was reared from larvae on Crataegus dahurica Koehne.

The author is deeply grateful to A. G. Zinov'ev for assistance with the description. The holotype is preserved in the collections of the Zoological Institute of the Soviet Academy of Sciences in Leningrad and part of the paratypes in the Institute of Biology, Yakut Branch, Siberian Division of the Academy.

Nematus egregius sp. n., judging by the description, is most similar to N. lucidus Panzer (Enslin, 1915; Lorenz and Kraus, 1957; Benson, 1958), which also lives on Crataegus. However, it differs sharply from that species in both the imaginal morphology and the larval structures.

Nematus lucidus Panzer

Nematus egregius sp. n.

Imago

Body elongate.

Abdomen black with rusty fasciae.

Legs red, only coxae, trochanters, and hindtarsi black.

Mesopleuron matt.

Body length of 9 8-11 mm, of \$8-11 क्ता .

Body of usual shape.

Body nearly wholly rusty, except 1st and 9th tergites.

Legs nearly wholly black.

Mesopleuron shining.

Body length of 9 6.5-8 mm, of & 5-6.5 mm.

Head light brown.

Dorsum blue-green, venter light

Pseudocerci present.

Head black.

Body black, thorax and abdominal segments 8-10 orange.

Pseudocerci lacking.

Nematus eareaius Kaimuk, sp. n.

Female. Head and antenna black, palpi and labrum pale, interantennal ridge black or piceous, mandibles brown. Thorax black, tegulae and nearly entire pronotum reddish, fore- and middle lobes of mesonotum laterally sometimes reddish. Mesal field of pronotum with deep groove. Abdomen reddish, tergite I mesally or wholly black, ovipositor and cerci black, tergite IX dark brown or black. Legs black, tip of forefemur, spurs and claws reddish or brown, foretibia and tarsus dark brown. Wings hyaline, veins and pterostigma black, veins and pterostigma black, C almost wholly and A basally pale, C widened slightly at tip, already in costal field at beginning of RS.

Head shining, evenly and lightly punctate, sometimes smooth above, with dense short pale hairs, clypeus and base of mandible with long pale hairs. Clypeus with deep rounded emargination; medial cavity deep, longitudinal; frontal field laterally indistinctly bounded. Lower frontal ridge interrupted mesally. Antenna short, as long as or 1.1-1.2 times length of costa (n = 14), 3rd segment a little shorter than greatest diameter of eye (0.6-0.8); relative lengths of antennal segments, starting with 3rd, as 3.6 : 6.0 : 5.4 : 4.5 : 3.3 : 3.5 : 3.5. POL : OOL : OCL = 28-32 : 20-23 : 18-20. Mesonotum shining, finely punctate; mesopleuron smooth, shining, covered over-all with dense pale hairs. Pterostigma 2.2-3.0 times as long as wide. Inner spur of hindtibia shorter than apical diameter of tibia, 0.3-0.4 length of hindbasitarsus. Claws as in Fig. 8. Abdomen finely striate, weakly shining.

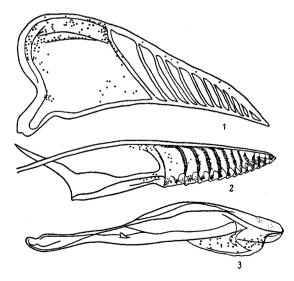


Fig. 1-3. Nematus egregius sp. n. 1) Ovipositor guide: 2) saw; 3) penis valve.

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