

New data of the leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) of the world fauna with description of 35 new taxons

Andrei A. Legalov

Legalov A.A. 2004. New data of the leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) of the world fauna with description of 35 new taxons. *Baltic J. Coleopterol.*, 4 (1): 63 - 88.

In the paper 35 new taxons (3 new genera, 10 new subgenera, 18 new species and 4 new subspecies) are described. Genus *Philorectus* Voss, 1924 placem.n. is transferred from tribe Isotheini to tribe Rhynchitini. New synonyms: *Mirabinvolvulus* Legalov, 2003 syn.n. for *Philorectus* Voss, 1924 and *Apoderus foveipennis* Suffrian, 1870: 228 syn.n. for *Compsapoderus* (s. str.) *erythrogaster* (Snelle van Vollenhoven, 1865) are presented. The status of *Gomadaranus* Kâno, 1930 stat.res. recovered. Changes of status to 3 taxons (*Neoxestolabus* Voss, 1943 stat.n., *Phyletobius* Voss, 1925 stat.n., *Agomadaranus* Voss, 1958 stat.n.). 38 new combinations are established.

Key words: Coleoptera, Curculionoidea, Rhynchitidae, Attelabidae, new taxons, new status, new placement, new synonym, new combination, phylogeny, world fauna

Andrei Legalov. Siberian Zoological Museum, Institute of Animal Systematics and Ecology, SB RAS, Frunze street-11, Novosibirsk 630091 Russia; e-mail: legalov@ngs.ru

INTRODUCTION

Families Rhynchitidae and Attelabidae (leaf-rolling weevils) together form a widespread monophyletic group including more than 2000 species (Legalov, 2003c). These beetles are characterised by their specific care of the offspring's. Some produce leaf rolls for their larvae; others damage fruits or vegetative parts of plants in which their larvae develop. The leaf-rolling weevils are characteristic inhabitants of forest biotopes, reach their greatest diversity in tropical and subtropical forests, and play an essential role in ecosystems as consumers of foliage. These weevils are widely distributed throughout most parts of the world, except of New Zealand and the Hawaiian Islands. The greatest number of species is found in the

Oriental, Afrotropical and Neotropical biogeographic regions.

Some species, such as *Rhynchites bacchus* (Linnaeus, 1758) and *Epirhynchites (Tshernyshevinius) auratus* (Scopoli, 1763), are agricultural pests, while many others damage trees and bushes in forests and parks.

The basic results of studying of the leaf-rolling weevils have been recently published by the author (Legalov, 2001, 2002a, 2002b, 2003a, 2003b, 2003c, 2003d, 2003e, 2003f). Present paper is continuation of these researches. In this paper corrected cladogram are submitted (figs. 20, 21, 64, 66, 98, 99, 100).

MATERIAL AND METHODS

Specimens are kept in the following collections and museums: HNHMB = Hungarian Natural History Museum (Budapest); CKJU = Collection of P. Kresl (Janovice nad Uhlavou); CJPM = Collection of J. Pelletier (Monnaie); IZH = Institut fuer Zoologie der Martin-Luther-Universitaet (Halle), NHML = Natural History Museum (London); MNHB = Museum fuer Naturkunde der Humboldt-Universitaet (Berlin); MZLU = Museum of Zoology Lund University (Lund); NRS = Naturhistoriska Riksmuseet (Stockholm); SZMN = Siberian Zoological Museum, Institute of Animal Systematics and Ecology, SB RAS (Novosibirsk); ZFMKB = Zoologisches Forschungsinstitut und Museum Alexander Koenig (Bonn); ZMAS = Institute of Zoology, RAS (Saint-Petersburg).

The phylogeny was reconstructed by method SYNAP420 (Baikov, 2000).

RESULTS

Family Rhynchitidae Gistel, 1848

Tribe Eugnamptini Voss, 1930

Genus *Proteugnamptellus* Legalov, 2003

Proteugnamptellus pardalis (Marshall, 1948) comb.n.

Eugnamptus pardalis Marshall, 1948: 419

Distribution. Myanmar.

Genus *Eugnamptinus* Legalov, 2003

Eugnamptinus furvus (Marshall, 1948) comb.n.

Eugnamptus furvus Marshall, 1948: 420

Distribution. Myanmar.

Eugnamptinus pannosus (Marshall, 1948)

comb.n.

Eugnamptus pannosus Marshall, 1948: 419

Distribution. Myanmar.

Tribe Rhynchitini Gistel, 1848

Subtribe Rhynchitina Gistel, 1848

Genus *Afrovolvulus* Legalov gen.n.

(fig. 20, 6-8, 13, 15, 114)

Type species *Rhynchites rhodesianus* Voss, 1938

Description. Body black, lacking lustre, with long, erect, light setae. Rostrum long, 1.5 times (of males) and 1.9-2.1 times (of females) longer than pronotum, weakly curved, with carina in basic half, in females longer and stronger curved than in males. Eyes strongly convex. Forehead wide, convex sparsely punctured. Antennae long. First and second segments of funicle equal length. Clava narrow, compact. Third segment longer than the second segment. Pronotum almost equal length and width. Disk weakly convex, sparsely transversal - wrinkled, more rough sculpture near scutellum. Sides weakly rounded, more direct in females. Elytra almost rectangular, clearly wider than pronotum. Humeri weakly smoothed. Greatest width on middle or behind middle. Intervals narrow, convex, finely and sparsely punctured. Striae rough, deep, with large points. Penultimate striae merges with last near the first ventrite. Metepisternum wide on edges finely punctured. Legs long. Femora widened. Tibiae almost direct. Protibiae longer than meso- and metatibiae. Tarsi long. Fifth segment of tarsi strongly lengthened. Claws with long teeth. Length of body: 2.7-3.4 mm.

Diagnosis. This new genus is close to genus *Pilosoinvolvulus* Legalov, 2003 but differs in having setae on the body. From genus *Cneminvolvulus* Voss, 1960 but differs by antennal club structure.

Etymology. The name is formed from words "afro" and "volvulus".

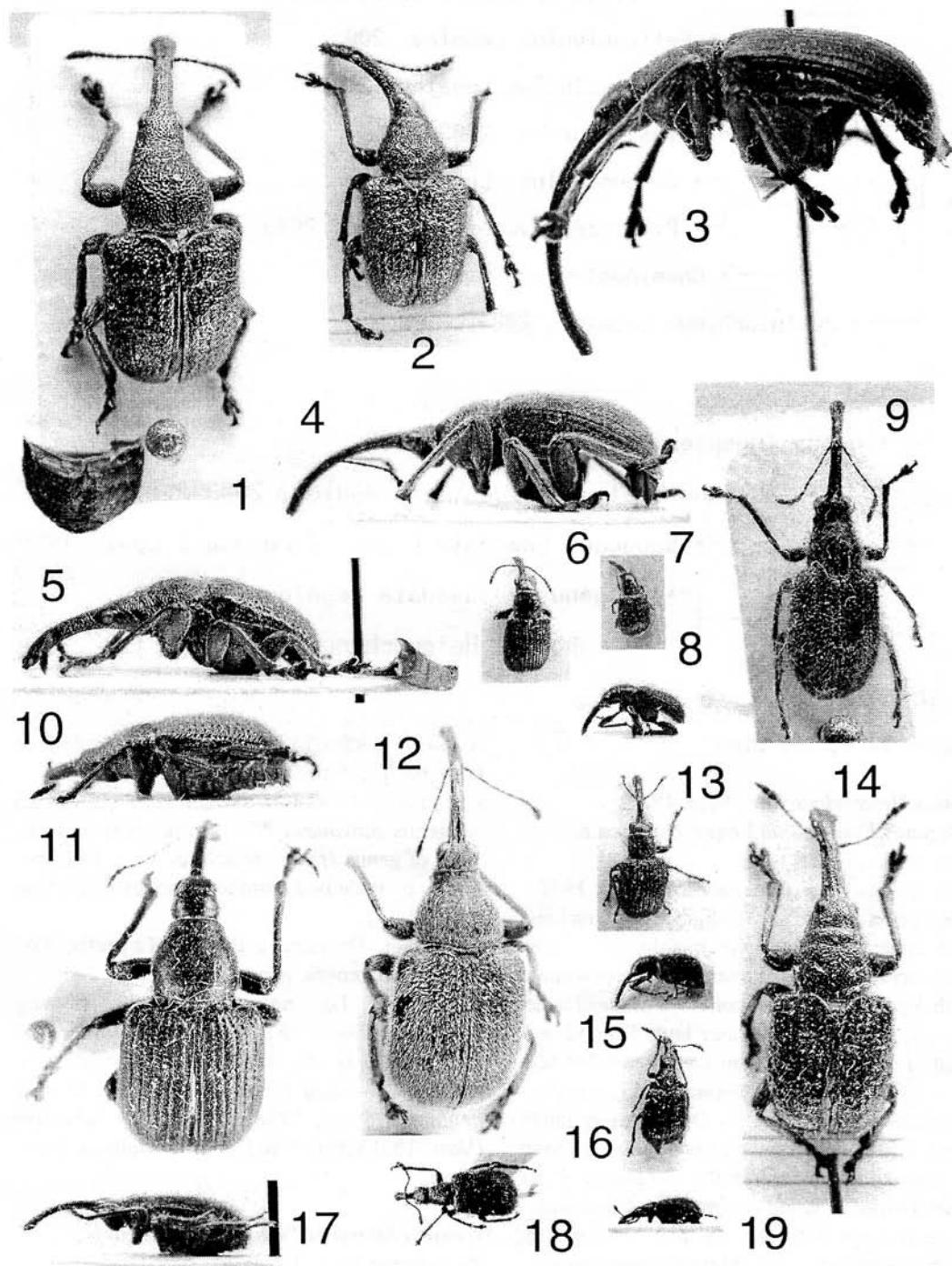
Remarks. 2 species (*Afrovolvulus rhodesianus* (Voss, 1938) comb.n. and *A. katonensis* Legalov sp.n.) from East Africa belong to this new genus.

Afrovolvulus katonensis Legalov sp.n.

(figs. 7, 15)

Holotype. Female (HNHMB), Tanzania, "Africa or., Katona, Inter Marti et Arusha".

Diagnosis. This new species is very similar to *Afrovolvulus rhodesianus* (Voss, 1938) but differs in the finer size of the body (2.7 mm), shorter rostrum, antennae attached closer to basis of the rostrum, strongly distally widening elytra and shorter setae on the body.



Figs. 1 - 19 (see explanation in text)

20



Fig. 20.

21

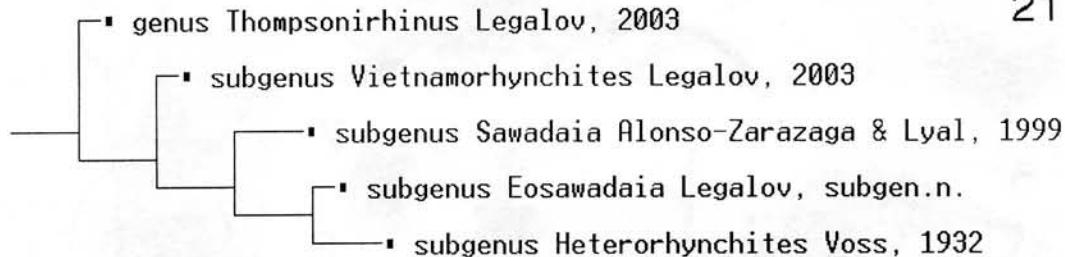


Fig. 21.

Distribution. Eastern Africa.**Genus *Heterorhynchites* Voss, 1932****Subgenus *Eosawadaia* Legalov subgen.n.**

(figs. 3, 6, 11, 12, 21, 101)

Type species *Rhynchites subtectus* Voss, 1938

Description. Body dark with blue lustre, with long, light, erect setae. Setae with metallic lustre. Rostrum very long. Sides of rostrum of males without teeth. Eyes large, weakly convex. Forehead wide, convex, punctured. Antennae long. Second segment of funicle longer than scapus and first segment taken together. Pronotum weakly transversal. Sides weakly rounded. Disk densely punctured. Elytra wide, almost rectangular. Humeri smoothed. Intervals almost flat, punctured. Striae clear. Points in striae rather deep. Penultimate striae merges with last on middle of elytra. Prothorax without tooth. Metepisternum narrow. Abdomen convex. Legs long. Procoxae without teeth. Femora widened. Tibiae almost direct,

weakly widening to apex. Tarsi long. Length of body: 6.0-13.0 mm.

Diagnosis. This new subgenus is similar to subgenus *Sawadaia* Alonso-Zarazaga et Lyal, 1999 of genus *Heterorhynchites* Voss, 1932 but differs by wide body and less convex eyes (figs. 9, 11, 12, 17).

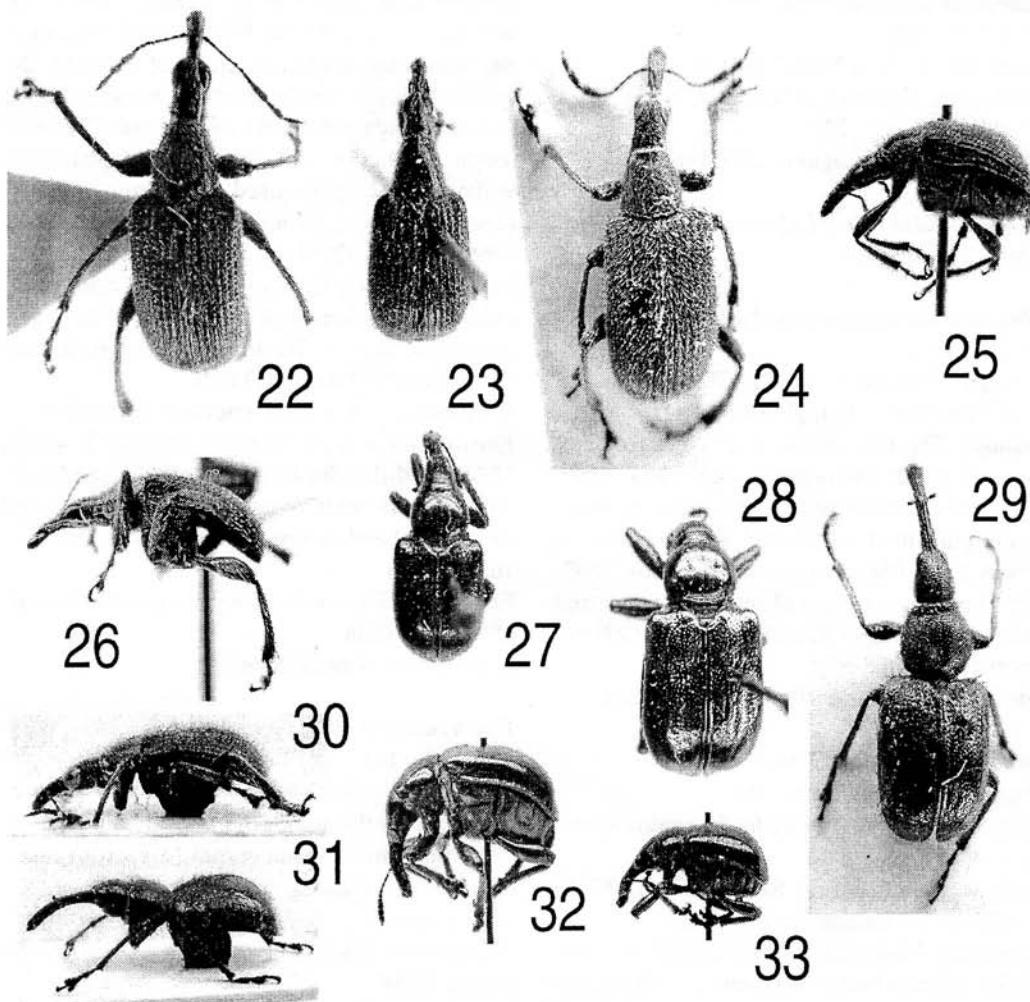
Etymology. The name is formed of a prefix "Eo" and the subgeneric name "*Sawadaia*".

Remarks. To new subgenus belong *Heterorhynchites (Eosawadaia) balaninoides* (Voss, 1938), *H. (E.) javanicus* (Thunberg, 1815), *H. (E.) kawiensis* (Hartmann, 1899), *H. (E.) pruinosus* (Voss, 1938) and *H. (E.) subtectus* (Voss, 1938) distributed in Indo-Malayan Province.

Genus *Philorectus* Voss, 1924 placem.n.***Philorectus* Voss, 1924: 40**

(fig. 22-26, 30, 105)

Type species *Philorectus insolitus* Voss, 1924



Figs. 22 - 33.

Mirabinvolvulus Legalov, 2003: 274 syn.n.

Type species *Mirabinvolvulus orlovi* Legalov, 2003

Remarks. The specimen *Philorectus insolitus* Voss, 1924 of collection NHML with labels "Khasia Hills, Assam" and "*Philorectus insolitus* m., Det. E. Voss" has been investigated. It was found out that this genus has been wrongly placed by Voss (1924) in tribe Deporaini (=Isotheini). The genus *Philorectus* Voss, 1924 is identical to recently described genus *Mirabinvolvulus* Legalov, 2003.

Key of species of genus *Philorectus*

1. Clava of antennae wider. Vietnam *Ph. orlovi* (Legalov)
- Clava of antennae narrower 2
2. Vertex more sparsely punctured. Setae on body longer. India *Ph. insolitus* Voss
- Vertex more densely punctured. Setae on body shorter. China *Ph. sjacomjanicus* Legalov sp.n.

***Philorectus insolitus* Voss, 1924**

(figs. 22, 30, 105)

Philorectus insolitus Voss, 1924: 40*Distribution.* Eastern and Southern India.***Philorectus orlovi* (Legalov, 2003) comb.n.**

(figs. 24, 30)

Mirabinvolvulus orlovi Legalov, 2003: 274*Distribution.* Vietnam.***Philorectus sjaomonjanicus* Legalov sp.n.**

(figs. 23, 25)

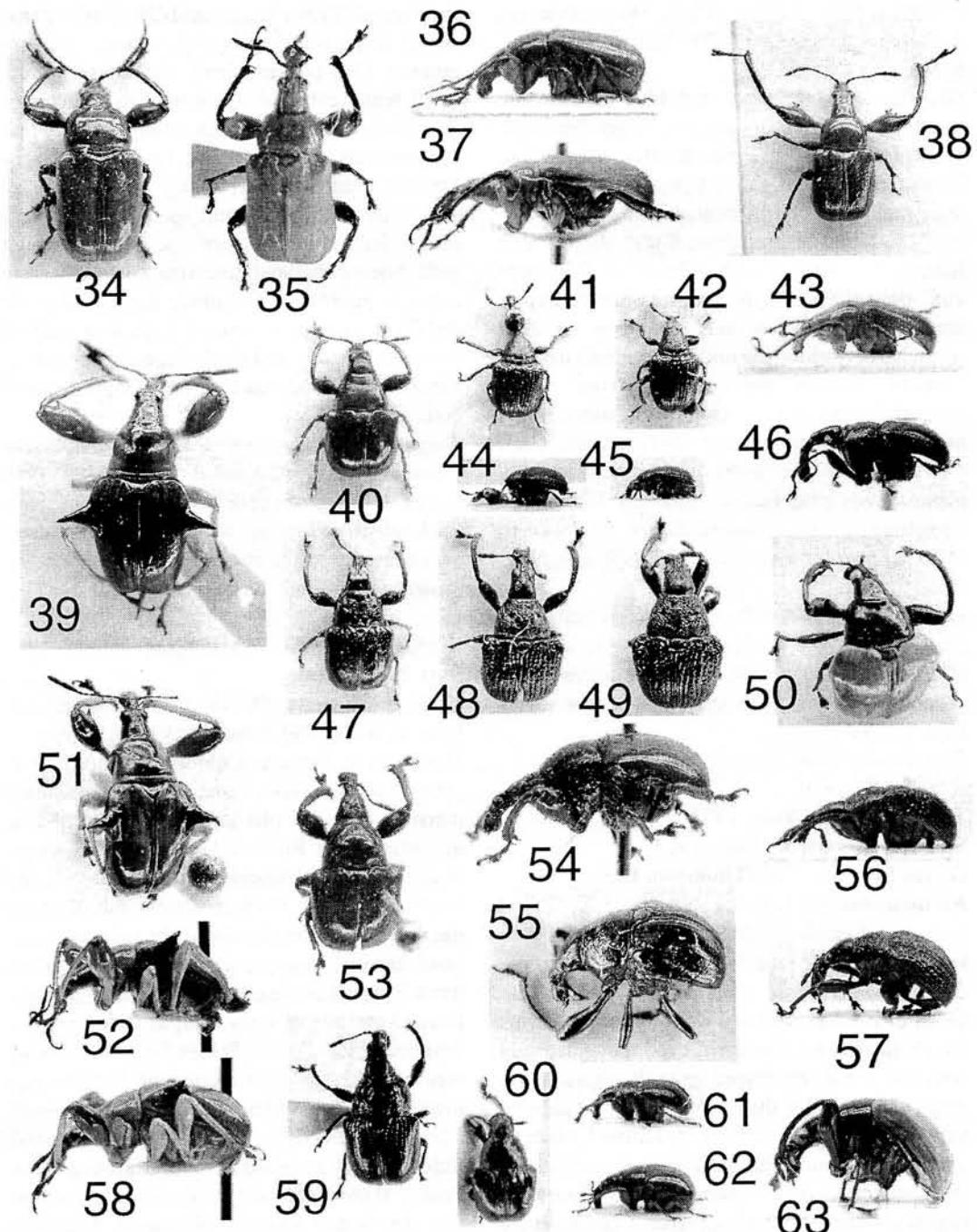
Holotype. Female (ZMAS), China, Yunnan, Sjaomonjan, 810 m, 31.III.1957, Pu Fu Di.*Diagnosis.* This new species is very close to other species of genus *Philorectus* Voss, 1924. From *Philorectus insolitus* Voss, 1924 differs by more densely punctured vertex and shorter setae on the body. From *Philorectus orlovi* (Legalov, 2003) differs by narrower clava of antennae, punctured vertex and strongly distally widening elytra. Length of body: 5.8 mm.*Distribution.* South-Western China (Yunnan).**Genus *Epirhynchites* Voss, 1953****Subgenus *Epirhynchites* s. str.*****Epirhynchites* (s. str.) *zherichini* Legalov sp.n.**

(figs. 1, 5, 117)

Holotype. Male (ZMAS), Russia, Siberia, Chita pr., Nerchinsk, Darasun.*Description.* Male: Body bronze. Sides of head and disk of pronotum with greenish outflow. Abdomen dark green. Body with semierect thin setae. Rostrum long, much longer the pronotum, curved, thick, densely punctured. Antennae located behind the middle of rostrum. Forehead wide, flat, densely punctured. Eyes not big, weakly convex. Vertex convex, densely punctured. Antennae long, but do not reach pronotum. Scapus and 1-segment of funicle oval, almost equal length. 2-segment longer than first segment, lengthened. 3-segment longer than 2-segment. 4-segment oval as 1-segment. 5-segment wide - oval, shorter than 4-segment. 6-segment more shortly than 5-segment. 7-segment round, shorter than 6-segment, equal to the length. Clava compact, not big. 1-segment of clava wide. 3-segment lengthened, longer than 2 segment. Pronotum equal length and width. Sides weakly rounded. Pronotal

groove clear. Disk convex, densely punctured, with weak medial striae. Elytra almost rectangular, with rough sculpture. Greatest width on the middle. Humeri convex. Intervals weakly convex, densely punctured. Striae weak. Points in striae rough. Prothorax without teeth. Metepisternum wide, roughly punctured. Abdomen convex, densely rugosity punctured. First and second ventrites wide. Third and fourth ventrites narrow. Fifth ventrite very narrow. Legs long. Femora widened. Tibiae thin. Protibiae long. Meso- and metatibiae shorter. Tarsi long. Claws with long tooth. Length of body: 8.8 mm.

Diagnosis. This new species is similar to *Epirhynchites* (*Epirhynchites*) *heros* (Roelofs, 1874) but differs by the completely reduced teeth on prothorax, wide 7 segment of the funicle and structure of eighth tergite of males (figs. 1, 2, 5, 10, 117, 118).*Etymology.* This new species is named in honour of V.V. Zherichin.*Distribution.* Eastern Siberia.***Epirhynchites* (*Epirhynchites*) *ignitus* (Voss, 1953) (fig. 14)***Rhynchites ignitus* Voss, 1953: 43*Remarks.* By the author it is allocated lectotypus – female from the collection ZFMKB with labels “Fukien, Kuatun, 2300 m, 10.V.1938”, “Paratypoid”, “*Rhynchites ignitus* m”, “Lectotypus *Rhynchites ignitus* Voss, A. Legalov design. 2004”.*Distribution.* South-Western China.**Genus *Mechoris* Billberg, 1820*****Mechoris ungaricus* (Herbst, 1783) (figs. 29, 31)***Curculio ungaricus* Herbst, 1783: 71*Rhynchites ursus* Gebler, 1830: 145*Remarks.* For *Rhynchites ursus* Gebler, 1830 by the author it is designated lectotypus - male from the collection NRS with labels “*Rh. Ursus*, Gebler, Sibiria occid., Gebler”, “Lectotypus *Rhynchites ursulus* Gebler, A. Legalov design. 2004”.**Genus *Teretriorhynchites* Voss, 1938****Subgenus *Teretriorhynchites* s. str.*****Teretriorhynchites* (s. str.) *caeruleus* (DeGeer, 1775)*****Teretriorhynchites* (s. str.) *caeruleus iranensis***



Figs. 34 - 63.

Legalov ssp.n. (figs. 16, 19, 116)

Holotype. Male (CJPM), N Iran, Mazandaran pr., S. Chalus, Kalandasht env., 1700-2200 m, 3-6.V.2001, S. Murzin.

Description. Male: Body dark blue with metallic lustre. Rostrum of average sizes, longer than head, weakly curved. Antennae located submedial. Forehead wide, flat, densely punctured. Eyes not big, weakly convex. Antennae of average sizes, reach first line of pronotum. Clava shorter than funicle. Pronotum weakly transversal. Disk convex, densely and roughly punctured. Elytra lengthened. Humeri weakly smoothed. Greatest width hardly behind the middle. Intervals narrow, weakly convex, punctured. Striae weak. Metepisternum narrow. Abdomen convex, finely punctured. First and second ventrites wide. Third and fourth ventrites narrow. Fifth ventrite very narrow. Legs long. Femora widened. Tibiae thin. Protibiae narrow, almost direct. Meso- and metatibiae wider and short. Tarsi long. Length of body: 2.5 mm.

Diagnosis. This new subspecies differs from other subspecies of *Teretriorhynchites* (s. str.) *caeruleus* (DeGeer, 1775) by the weakly convex eyes, pronotum pressed with sides and longer elytra (figs. 16-19).

Distribution. Iran

Tribe Byctiscini Voss, 1923**Subtribe Bycticina Voss, 1923****Genus *Byctiscus* C.G. Thomson, 1859*****Byctiscus macros* Legalov sp.n. (figs. 28, 32)**

Holotype. Female (ZMAS), China, Shaanxi, 100 km O of Xian, Mt. Hua, 9-12.V.1999, S. Kurbatov.

Description. Female: Colouring of body green. Sides of rostrum violet. Two longitudinal strips on elytra red. Forehead with red macula. Body with short, thin, appressed setae. Rostrum of average sizes, longer than head, curved, widening to apex, lacking lustre, finely punctured. Place of attachment of antennae located on the middle of the rostrum. Forehead narrow, weakly pressed, rugosity - dot. Eyes not act from a contour of a head. Vertex convex, finely rugosity punctured. Temples lengthened. Antennae of average sizes. Scapus oval. 1-segment of funicle longer than 2-segment. 3-segment more longly than 2-segment.

3- and 4-segments approximately equal length. 5- and 6-segments wide - oval. 7-segment wide, transversal. Clava lengthened. Pronotum transversal. Sides weakly rounded. Grooves well expressed. Disk convex, finely and sparsely punctured, with weak medial line and two deepenings. Scutellum wide. Elytra wide, almost rectangular, for scutellum weakly pressed. Greatest width behind the middle. Humeri weakly smoothed. Intervals wide, flat, finely and sparsely punctured. Striae clear, points in them fine. Metepisternum wide, finely punctured. Abdomen convex, densely rugosity punctured. Pygidium convex, densely and finely rugosity punctured. Legs long. Femora widened, densely and finely rugosity punctured. Tibiae long, weakly curved. Tarsi long. Length of body: 7.8 mm.

Diagnosis. This new species is similar to *Byctiscus fulminans* Voss, 1930 and *B. lucidus* Voss, 1930 but differs by green bottom of the body and legs, thick punctured metepisternum and intervals of elytra less often punctured.

Distribution. South-Eastern China (Shaanxi).

***Byctiscus potanini* Legalov sp.n.**

(figs. 27, 33)

Holotype. Female (ZMAS), China, Sichuan, Datjan-lu, 1.VII.1899, Potanin.

Description. Female: Colouring of body bluish-green. Edges of elytra violet. Mesepisternum and metathorax with violet lustre. Body with sparse, appressed setae. Rostrum of average sizes, longer than head, curved, widening to apex, densely and largly punctured. Place of attachment of antennae located on the middle of the rostrum. Forehead narrow, strongly pressed, rugosity punctured. Eyes not convex. Vertex convex, finely punctured. Antennae of sizes. Scapus wide - oval. 1-segment of funicle longer than 2-segment. 3-segment more longly than 2-segment. 5- and 6-segments round. 7-segment strongly transversal. Clava lengthened. Pronotum weakly transversal. Sides weakly rounded. Pronotal groove weak. Postnotal groove almost not expressed. Disk convex, finely and sparsely punctured. Scutellum wide. Elytra almost rectangular, for scutellum weakly pressed. Greatest width on the middle. Humeri weakly smoothed. Intervals wide, flat, densely punctured. Striae clear, points in them

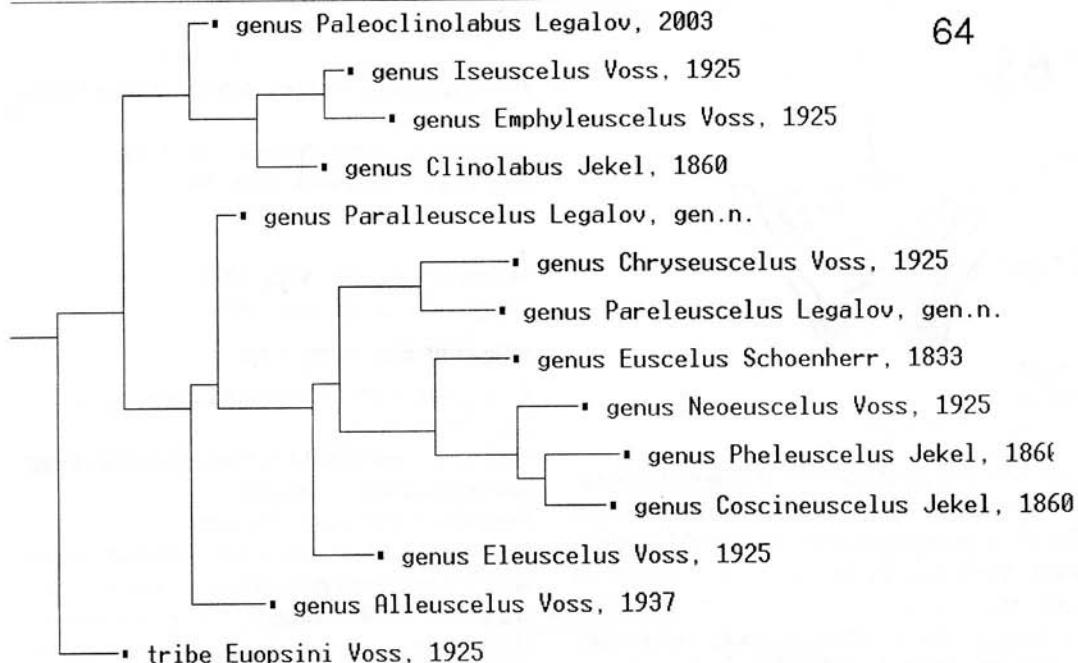


Fig. 64.

fine. Metepisternum wide, finely punctured. Abdomen convex, densely rugosity punctured. Pygidium convex, densely and finely rugosity punctured. Legs long. Femora widened, densely and finely rugosity punctured. Tibiae long, weakly curved. Tarsi long. Length of a body: 5.8 mm.

Diagnosis. This new species is similar to *Byctiscus impressus* (Fairmaire, 1899) but differs by gently and sparsely punctured pronotum with not rugosity basis, less often punctured metepisternum and blue-green colouring.

Distribution. South-Western China (Sichuan).

Subtribe Listrobyctiscina Legalov, 2003

Genus *Nelistrobyctiscus* Legalov, 2003

Nelistrobyctiscus (s. str.) *luchti* (Voss, 1940) comb.n.

Listrobyctiscus luchti Voss, 1940: 90

Distribution. Indonesia (Java).

Family Attelabidae Billberg, 1820

Subfamily Attelabinae Billberg, 1820

Supertribe Attelabitae Billberg, 1820

Tribe Euopsini Voss, 1925

Subtribe Synaptopsina Legalov, 2003

Genus *Sawadaeuops* Legalov, 2003

Subgenus *Rugosoeuops* Legalov, 2003

Sawadaeuops (Rugosoeuops) indicus Legalov sp.n.

(figs. 41, 42, 44, 45, 113)

Holotype. Male (CKJU), S India, Kamataka st., Coorg district, 10 km SE of Virajpet, near road Virajpet–Cannanore, 700 m, 5-7.VI.1999, Kejval & Tryzna.

Paratypes. 1 Male (SZMN), idem; 3 Females (CKJU), 1 Female (SZMN), S India, Tamil Nadu st., Nilgiri hills, 15 km SE of Kotagiri, Kunjappanal env., 900 m, 22-30.V.1999, Kejval & Tryzna.

Description. Body dark with green - copper lustre. Male: Rostrum short, widening to apex, finely punctured, lacking lustre, direct. Eyes large, convex. Forehead very narrow. Vertex convex, finely punctured. Antennae short. Scapus oval. First segment of funicle wide - oval. Clava narrow, pointed. Pronotum campaniform, weakly transversal. Disk convex transversal - wrinkled. Elytra almost rectangular, weakly narrowed to apex. Greatest width in humeri. Humeri convex. Intervals convex, wide, smooth. Striae clear. Points in striae large. Abdomen convex, on the middle flattened, finely and densely punctured. Pygidium roughly and densely punctured. Legs long. Femora cla-

65

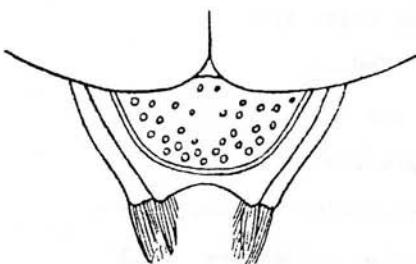


Fig. 65.

vate, with fine protuberances at apexes. Protibiae almost direct. Mesotibiae biconcave, with sharp thornlike protuberance on an external topmost third. Metatibiae longer, biconcave. Length of body: 2.4-2.7 mm.

Female: Clava of antennae shorter and wide. Pronotum narrower. Abdomen convex with lines of setae. Tibiae about mucro and uncus. Protibiae weaker lengthened, biconcave. Length of body: 2.3-2.5 mm.

Diagnosis. This new species is similar to *Sawadaeuops (Rugosoeuops) hermanni* Legalov, 2003 but differs by the metallic lustre, stronger convex eyes, shorter antennae, wider pronotum, sharp protuberance on mesotibiae and armament of the endophallus.

Distribution. Southern India.

Tribe Euscelini Voss, 1925

Subtribe Alleuselina Legalov, 2003

Genus *Paralleuscelus* Legalov gen.n.

(fig. 64)

type species: *Euscelus deletangi* Hustache, 1923
Description. Body red. Antennae, scutellum, in part tibiae, meso- and metafemora black. Head longer than wider, smooth. Eyes not big, convex. Antennae long. Pronotum transversal, smooth. Elytra equal length and width, parallel - foreign. Intervals wide, finely punctured. Striae weak. Profemora with two teeth in males, with one tooth in females. Protibiae of males long, thin, weakly curved. Length of body: 3.0-4.0 mm.

Diagnosis. This new genus is close to *Alleuscelus* Voss, 1937 but differs by the profemora with two teeth, ventrites without erecting setae and other

colouring.

Paralleuscelus (s. str.) *deletangi* (Hustache, 1923) comb.n.

Euscelus deletangi Hustache, 1923: 38

Euscelus insignis Voss, 1925: 39

Distribution. Brazil, Bolivia.

Subtribe Euscelina Voss, 1925

Genus *Eleuscelus* Voss, 1925

Subgenus *Eleuscelus* s. str.

Eleuscelus (s. str.) *huanucus* Legalov sp.n.

(figs. 38, 43, 107)

Holotype. Male (MZLU), Peru, Huanuco, Tingo Maria, 27.I.1984, L. Huggert.

Paratype. 1 Male (SZMN), idem.

Description. Male: Body red. Antennae, tibiae, tarsi and apexes of femora black. Rostrum of average sizes, weakly widening to apex, finely punctured. Forehead pressed, furrowed. Vertex smooth, convex. Temples strongly lengthened. Antennae long. Segments of funicle lengthened. Clava long, pointed. Pronotum strongly transversal. Sides almost direct. Disk convex, smooth. Elytra weakly are widening to apex. Greatest width behind the middle. Humeri weakly convex. Intervals narrow, flat. Striae weak, point in them large. Abdomen convex. Fifth ventrite with deepening. Legs long. Forward legs strongly lengthened. Profemora strongly widened, with doubled small teeth. Protibiae long, almost direct. Meso- and metafemora weakly widened, without teeth. Meso- and metatibiae biconcave. Forward tarsi long. Length of body: 4.1-4.7 mm.

Diagnosis. This new species differs from other species of this subgenus by the doubled tooth on femora and armament of the endophallus.

Distribution. Peru.

Subgenus *Eleusceloides* Legalov subgen.n.

(fig. 65)

Type species: *Euscelus bondari* Voss, 1938

Diagnosis. This new subgenus is similar to nominate subgenus but differs by the fifth ventrite of males with deepening and teeth on each side and also with bunches of long yellow setae.

Remarks. The description as *Euscelus bondari* in Voss (1938e) on page 333-334. To this new

subgenus belongs Brazilian *Eleuscelus* (*Eleusceloides*) *bondari* (Voss, 1938).

Genus *Pareleuscelus* Legalov gen.n.

(fig. 34-37, 64)

Type species: Pareleuscelus napensis Legalov sp.n.

Description. Body red - yellow or red - brown. Antennae, tibiae, tarsi, apexes of femora and sometimes teeth on profemora, and in part the first segment of tarsi black. Abdomen sometimes brown. Rostrum weakly lengthened, curved or short and thick, finely punctured. Eyes not big, strongly convex. Forehead wide, pressed, with 3 carina.

Vertex smooth. Temples long. Antennae long, for the middle of pronotum or the elytra reach. Scapus and segments of funicle oval. Clava long, equal on length to funicle, narrow. Last segment longer than second segment. Pronotum wide, strongly transversal. Sides almost direct. Disk convex, finely punctured. Elytra almost rectangular, lengthened. Humeri weakly convex. First interval pressed near scutellum. Intervals smooth or finely wrinkled. Striae weak. Abdomen convex. Fifth ventrite with deepening. Pygidium with carina. Legs long. Forward legs lengthened. Profemora strongly widened, with one tooth. Protibiae long, weakly bi-concave, with long mucro and uncus. Meso- and

66

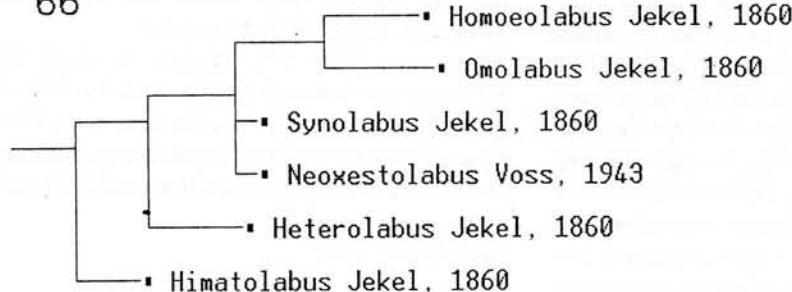


Fig. 66.

67

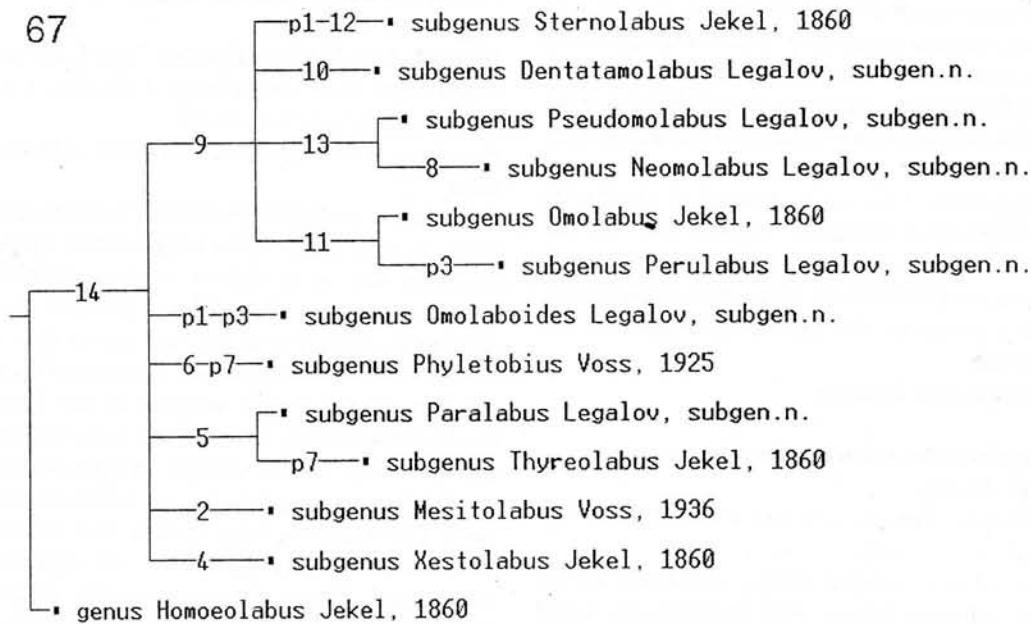


Fig. 67.

metafemora weakly widened, without teeth. Meso- and metatibiae biconcave. Length of body: 6.4-6.5 mm.

Diagnosis. This new genus is similar to genus *Eleuscelus* Voss, 1925 but differs by the strongly lengthened and thin clava of antennae, carina on the pygidium, and large size.

Pareleuscelus napensis Legalov sp.n.

(figs. 35, 37)

Holotype. Female (HNHMB), Ecuador, Prov. Napo, Santa Rosa, 600 m, 27.I.1998, L. Nadai.

Description. Female: Body red - yellow. Antennae, tibiae, tarsi, apexes of femora black. Abdomen brown. Head lengthened. Rostrum weakly lengthened, curved, finely punctured. Eyes not big, strongly convex. Forehead wide, pressed, with 3 carina. Vertex smooth. Temples long. Antennae long, for the middle of pronotum. Scapus and segments of funicle oval. Clava long, equal on length to funicle, narrow. Last segment longer than second segment. Pronotum wide, strongly transversal. Sides almost direct. Disk convex, finely punctured. Elytra almost rectangular, lengthened. Humeri weakly convex. First interval pressed near scutellum. Intervals finely wrinkled. Striae weak. Abdomen convex. Fifth ventrite with deepening. Pygidium with sharp carina at the basis. Legs long. Forward legs lengthened. Profemora strongly widened, with one small tooth. Protibiae long, weakly biconcave, with long mucro and uncus. Meso- and metafemora weakly widened, without teeth. Meso- and metatibiae biconcave. Length of body: 6.4 mm.

Diagnosis. This new species is similar to *Pareleuscelus iquitensis* Legalov sp.n. but differs by other colouring, wrinkled intervals of the elytra, shorter antennae, small teeth on profemora, sharp carina on the pygidium, longer and thin rostrum.

Distribution. Ecuador.

Pareleuscelus iquitensis Legalov sp.n.

(figs. 34, 36)

Holotype. Female (CKJU), Peru, Iquitos, VII-VIII.1999, J. Secky.

Description. Female: Body red - brown. Antennae, apexes of femora, teeth on profemora, in part tibiae and first segment of tarsi black. Rostrum

short, weakly curved, wide, thick. Eyes not big, strongly convex. Forehead wide, pressed, with 3 carina. Vertex smooth. Temples long. Antennae long. Scapus and segments of funicle oval. Clava long, equal on length to funicle, narrow. Last segment longer than second segment. Pronotum wide, strongly transversal. Sides almost direct. Disk convex, finely punctured. Elytra almost rectangular, lengthened. Humeri weakly convex. First interval pressed near scutellum. Intervals smooth. Striae weak. Abdomen convex. Fifth ventrite with deepening. Pygidium with weak carina in topmost part. Legs long. Forward legs lengthened. Profemora strongly widened with one tooth. Protibiae long, weakly biconcave, with long mucro and uncus. Meso- and metafemora weakly widened, without teeth. Meso- and metatibiae biconcave. Length of body: 6.5 mm..

Diagnosis. This new species is close to *Pareleuscelus napensis* Legalov sp.n. but differs by the other colouring, smooth intervals of the elytra, longer antennae, large teeth on profemora, weak carina on the pygidium, short and thick rostrum.

Distribution. Peru.

Genus Pheleuscelus Jekel, 1860

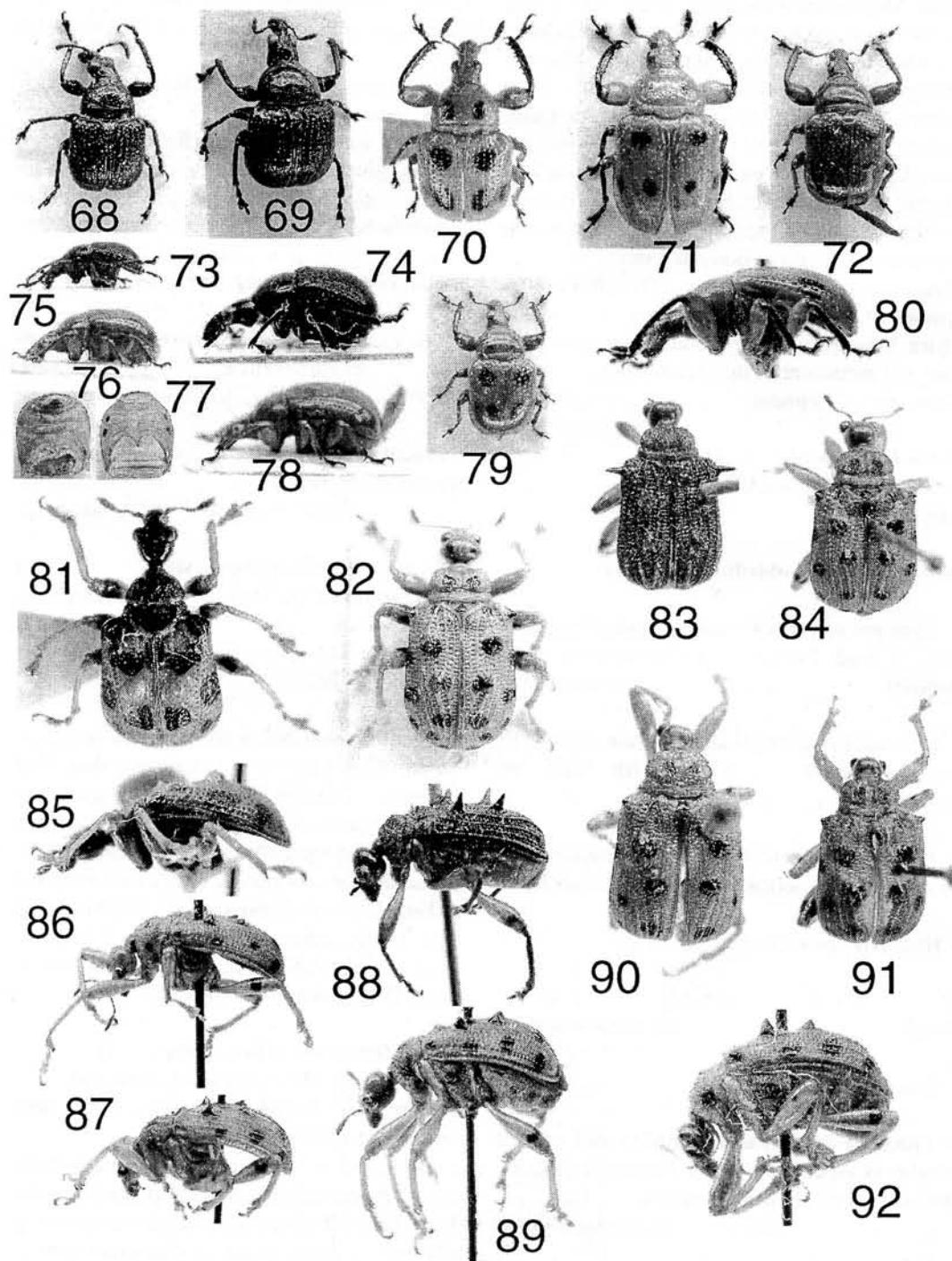
Pheleuscelus nigrodentatus Legalov sp.n.

(figs. 39, 51, 52, 58, 104)

Holotype. Male (ZMAS), Ecuador, 75 km E of Coca on the Napo River, Sasha lodge, 1.IV.2001, T.N. Vereschagina, S.O. Sergievsky.

Paratypes. 1 Male (SZMN), 1 Female (ZMAS), idem.

Description. Body yellow-brown. Pronotum with more or less clear wide longitudinal strips. Protibiae, base of profemora, average and back legs, and bottom yellow. Thorns on elytra, forward tarsi, clava of antennae and in part funicle black. Male: Head lengthened. Rostrum of average sizes, strongly curved, widening to apex. Forehead narrow, weakly convex. Eyes large, strongly convex. Vertex convex, smooth. Temples lengthened. Antennae long. Scapus and funicle lengthened. Clava narrow, long, shorter than funicle. Pronotum square, pressed on each side. Disk convex, smooth. Elytra almost rectangular, weakly narrowed to apex. Humeri smoothed. Behind hu-



Figs. 68 - 92.

meri long and sharp teeth. Intervals wide, smooth. First and second intervals at basis convex. Striae weak. Metepisternum smooth. Abdomen convex, smooth. Fifth ventrite with deepening. Legs long. Forward legs strongly lengthened. Profemora strongly widened, with 1 tooth. Protibiae long, narrow. Meso- and metafemora without teeth, narrower. Meso- and metatibiae biconcave. Length of body: 6.1 mm. Female: Forward legs shorter. Protibiae wider, biconcave. Fifth ventrite without deepening. Apex of tibiae about mucro and uncus. Lengths of body: 6.3 mm.

Diagnosis. This new species differs from other species of this genus by the large teeth on the elytra, long antennae, pronotum pressed on each side and armament of the endophallus.

Distribution. Ecuador.

Tribe *Hybolabini* Voss, 1925

Subtribe *Omolabina* Legalov, 2003
(fig. 66)

Key of genera of subtribe Omolabina

1. Eyes not convex or weakly convex from contour of head. Femora of males without teeth. America.....*Omolabus* Jekel

- Eyes usually strongly convex from contour of head. Femora of males with teeth or protuberances.....2

2. Humeri prominent. Body dark. Pronotum red-brown. South America.....*Heterolabus* Jekel

- Humeri not prominent.....3

3. Eyes weakly convex. Brazil.....*Neoxestolabus* Voss

- Eyes strongly convex.....4

4. Procoxae strongly approached to back edge of prothorax especially of males. Femora with finely protuberances. Northern America.....*Homoeolabus* Jekel

- Procoxae settles down almost on middle of prothorax. Profemora of males with teeth. North-

ern America.....*Synolabus* Jekel

Genus *Neoxestolabus* Voss, 1943 stat.n.

Xestolabus subgenus *Neoxestolabus* Voss, 1943: 31

Type species: *Xestolabus clinolaboides* Voss, 1938; monotypes

Remarks. Cladistic analysis (fig. 66) has shown that the given taxa should be considered as an independent genus, more primitive than genus *Omolabus*.

Key of subgenera of genus *Neoxestolabus*

1. Procoxae without tooth. Profemora with thorn-like protuberance of males. Brazil.....*Neoxestolabus* s. str.

- Procoxae with two teeth. Profemora with two teeth of males. Brazil.....*Neoxestolaboides* Legalov subgen.n.

Subgenus *Neoxestolabus* s. str

Neoxestolabus (s. str.) *clinolaboides* (Voss, 1938) comb.n.

Xestolabus clinolaboides Voss, 1938: 156

Distribution. Brazil.

Subgenus *Neoxestolaboides* Legalov subgen.n.

Type species: *Xestolabus jatahyensis* Voss, 1925

Diagnosis. This new subgenus is similar to nominate subgenus but differs by the procoxae with two teeth and profemora with two teeth of males.

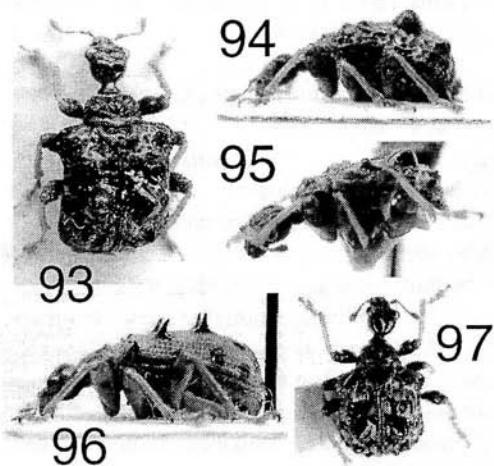
Remarks. The description of this new subgenus as *Xestolabus jatahyensis* in Voss (1925) on page 270. To this subgenus belong only 1 species - *Neoxestolabus* (*Neoxestolaboides*) *jatahyensis* (Voss, 1925) comb.n.) from Brazil.

Genus *Omolabus* Jekel, 1860 (fig. 67)

Attelabus sect. *Omolabus* Jekel, 1860: 191

Type species: *Attelabus bifoveatus* Jekel, 1860; original designation

Phylogeny. For revealing phylogenetic relationships between subgenera of the genus *Omolabus* Jekel, 1860 it has been constructed cladogram (fig. 67). For its construction 14 characters (tabl. 1) have been used.



Figs. 93 - 97.

Characters:

1. Rostrum of average sizes of males (0) - rostrum long of males (1);
2. Prementum without tooth (0) - prementum with tooth (1);
3. Apex part of rostrum from below without carina (0) - apex part of rostrum from below with carina (1);
4. Eyes convex heads from contour (0) - eyes not convex heads from contour (1);
5. First line of prothorax without teeth erecting forward (0) - first line of prothorax with teeth (1);
6. Pronotum not conical (0) - pronotum conical (1);
7. Pronotum smooth (0) - pronotum rugosity punctured (1);
8. Pronotum without protuberances (0) - pronotum with protuberances (1);
9. Humeri smoothed or weakly convex (0) - humeri strongly convex, either with tooth, or with convexity behind them (1);
10. Humeri without tooth (0) - humeri with tooth (1);
11. Humeri weakly convex or smoothed (0) - humeri prominent convex (1);
12. Lengthened convexity are absent behind humeri (0) - lengthened convexity are available behind humeri (1);
13. Humeri weakly convex (0) - humeri strongly convex (1);

14. Femora with fine protuberances (0) - femora without protuberances (1).

Subgenus of this genus are strongly detached from each other (fig. 67). Four subgenera (*Xestolabus*, *Mesitolabus*, *Phyletobius* and *Omolaboides*) is detached due to autapomorphic characters. Subgenera *Paralabus* and *Thyreolabus* is close due to first line of the prothorax with teeth. The large bunch is formed with 6 subgenera (*Sternolabus*, *Dentatamolabus*, *Pseudomolabus*, *Neomolabus*, *Omolabus* s. str. and *Perulabus*). These taxons is united due to synapomorphic constitution of the humeri. From them are closest subgenera *Pseudomolabus* and *Neomolabus* with strongly convex humeri, and also subgenera *Omolabus* s. str. and *Perulabus* with prominent convex humeri. Subgenera *Sternolabus*, *Neomolabus* and *Perulabus* is evolutionary most advanced.

Key of subgenera of genus *Omolabus*

1. Humeri smoothed or weakly convex.....2
- Humeri strongly convex, or with tooth, or prominent convex, or behind humeri available lengthened convexity.....7
 2. Eyes almost do not convex from contour of head. Central and South America.....*Xestolabus* Jekel
 - Eyes clearly convex from contour of head.....3
 3. First line of prothorax with directed forward tooth.....4
 - First line of prothorax without tooth.....5
 4. Pronotum smooth or wrinkled. Central and South America.....*Paralabus* Legalov subgen.n.
 - Pronotum roughly rugosity punctured. Brazil.....*Thyreolabus* Jekel
 5. Pronotum conical. Beetles large (9.0 mm). Central America.....*Phyletobius* Voss stat.n.

- Pronotum not conical. Beetles finer (2.3-7.0 mm).....6
6. Elytra narrowed to apex. Prementum extend in long tooth of males. Columbia....*Mesitolabus* Voss
- Elytra not narrowed to apex. Pronotum gently punctured. Rostrum longs of males, longer than pronotum, from below in topmost half with carina. Central America.....*Omolaboides* Legalov subgen.n.
7. Humeri with tooth or prominent.....8
- Humeri strongly convex or behind humeri available lengthened convexity.....9
8. Humeri with tooth. Central America.....*Dentatomolabus* Legalov subgen.n.
- Humeri prominent.....10
9. Protibiae of males shorter, almost direct, wide. Body one-coloured. Central and South America.....*Omolabus* s. str.
- Protibiae of males long, strongly curved, narrow. Body two-coloured. Peru.....*Perulabus* Legalov subgen.n.
10. Behind humeri available lengthened convexity. Central and South America...*Sternolabus* Jekel
- Convexity behind humeri absent.....11
11. Pronotum with protuberances. Brazil.....*Neomolabus* Legalov subgen.n.
- Pronotum without protuberances. Central and South America.....*Pseudomolabus* Legalov subgen.n.

Subgenus *Xestolabus* Jekel, 1860

Attelabus sect. *Xestolabus* Jekel, 1860: 192

Type species: *Attelabus corvinus* Gyllenhal, 1839; original designation

Remarks. To this subgenus belong *Omolabus (Xestolabus) centomyrciae* (Voss, 1925), *O. (X.) corvinus* (Gyllenhal, 1839), *O. (X.) nitidus*

(Fabricius, 1801), *O. (X.) rubellus* (Voss, 1925) and *O. (X.) tabaci* (Voss, 1925).

Subgenus *Paralabus* Legalov subgen.n.

(figs. 40, 47, 61, 62, 108)

Type species: *Omolabus (Paralabus) argentinicus* Legalov sp.n.

Description. Body from red up to dark brown or black, sometimes head and profemora darker. Prementum with two small teeth. Forehead of average sizes, impressed, sometimes with two carinas. Eyes not convex from contour of head or weakly convex. Temples lengthened. Antennae from short up to longer. First line of prothorax with small directed forward teeth, sometimes teeth very weak. Pronotum strongly transversal, almost trapezoid. Disk convex, from smooth up to roughly transversal - wrinkled. Elytra wide - oval. Humeri convex. Intervals flat, wide, smooth, punctured or wrinkled. Striae weak or very weak. Abdomen convex, smooth. Legs long. Forward legs lengthened. Profemora strongly widened. Protibiae long, narrow, curved. Meso- and metatibiae short, bi-concave. Length of body: 2.3-4.8 mm.

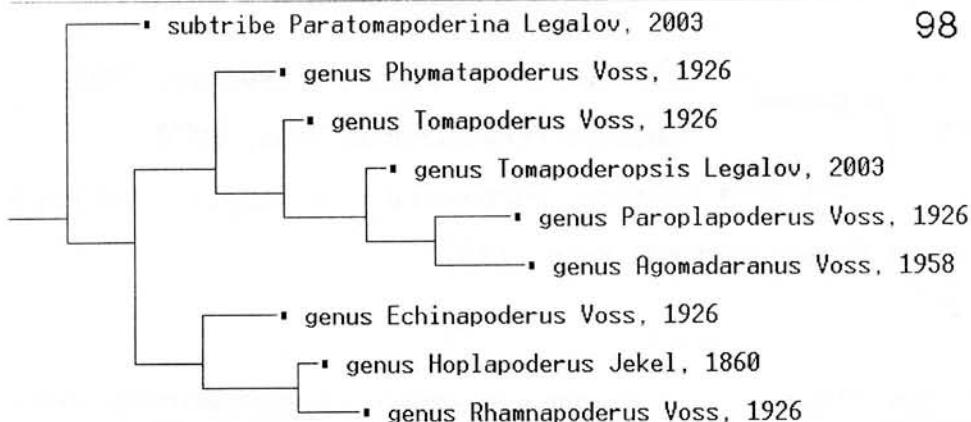
Diagnosis. The new subgenus differs from other subgenera by the first line of the prothorax with directed forward teeth.

Remarks. To this subgenus belong *Omolabus (Paralabus) angustifrons* (Voss, 1925), *O. (P.) argentinicus* Legalov sp.n., *O. (P.) biplagiatus* (Voss, 1951), *O. (P.) chalceus* (Voss, 1957), *O. (s. str.) dubius* Voss, 1938, *O. (P.) lepidus* (Voss, 1930), *O. (P.) mutabilis* (Jekel, 1860), *O. (P.) placidus* (Jekel, 1860), *O. (P.) sedatus* (Sharp, 1889), *O. (P.) schirimi* (Voss, 1925) and *O. (P.) tricolor* (Kirsch, 1874).

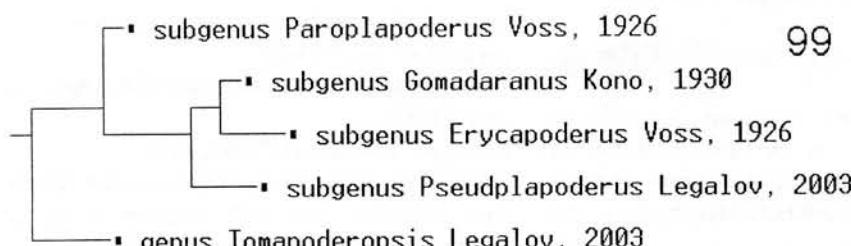
***Omolabus (Paralabus) argentinicus* Legalov sp.n. (figs. 47, 61, 108)**

Holotype. Male (ZMAS), Argentina, Misiones Loreto, 12.IV.1928, A. Ogloblin.

Description. Male: Body naked, lacking lustre. Colouring dark brown, head and profemora darker. Rostrum of average sizes, equal on length to head, weakly curved, sparsely and largly punctured. Prementum with two small tooth. Antennae located in first third of rostrum. Forehead of average sizes, impressed, with two carinas. Eyes not convex from contour of head. Vertex pressed. Tem-



Figs. 98.



Figs. 99.

ples lengthened. Antennae short. Scapus and first segment of funicle oval, considerably to thickness of other segments of funicle. Clava narrow. First segment longer than second. Third segment weakly pointed. First line of prothorax with small directed forward teeth. Pronotum strongly transversal, almost trapezoid. Disk convex, roughly transversal - wrinkled. Elytra wide - oval. Humeri convex. Intervals flat, wide, finely wrinkled. Striae weak, especial in apex of part. Abdomen convex, smooth. Legs long. Forward legs lengthened. Profemora strongly widened. Protibiae long, narrow, curved. Meso- and metatibiae short, biconcave. Length of body: 3.3 mm.

Diagnosis. This new species is close to *Omolabus (Paralabus) placidus* (Jekel, 1860) but differs by the finer size, more dark colouring, not convex eyes, stronger transversal pronotum and weaker convex humeri.

Distribution. Argentina.

Subgenus *Phyletobius* Voss, 1925 stat.n.

Phyletobius Voss, 1925: 242

Type species: *Phyletobius equestris* Voss, 1925; original designation

Omolabus (Phyletobius) equestris (Voss, 1925) comb.n.

Phyletobius equestris Voss, 1925: 265

Distribution. Costa Rica.

Subgenus *Mesitolabus* Voss, 1936

Omolabus subgenus *Mesitolabus* Voss, 1936: 297

Type species: *Omolabus aeneicollis* Voss, 1925; monotypes

Remarks. This monotypic subgenus belongs *Omolabus (Mesitolabus) aeneicollis* Voss, 1925.

Subgenus *Thyreolabus* Jekel, 1860

Attelabus sect. *Thyreolabus* Jekel, 1860: 195

Type species: *Attelabus corniculatus* Gyllenhal, 1839 (= *Rhynchites piceus* Germar, 1824); original designation

Remarks. To this subgenus belong *Omolabus (Thyreolabus) deceptor* (Jekel, 1860), *O. (Th.)*

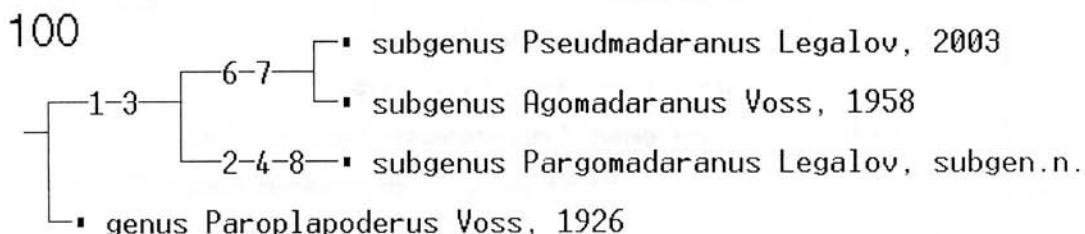


Fig. 100

cearensis (Voss, 1951), *O. (Th.) corumbaensis* Voss, 1929, *O. (Th.) piceus* (Germar, 1824), *O. (Th.) thoracalis* Voss, 1943.

Subgenus *Omolaboides* Legalov subgen.n.

(figs. 46, 59, 111)

Type species: Attelabus laesicollis Gyllenhal, 1839.

Diagnosis. This new subgenus is similar to subgenus *Xestolabus* Jekel, 1860 but differs by the convex eyes and long rostrum. From subgenus *Thyreolabus* Jekel, 1860 but differs by the gently punctured pronotum, long rostrum, from below in topmost half with carina.

Remarks. The description as *Xestolabus laesicollis* in Voss (1925) on page 276-277. To this subgenus belongs *Omolabus* (*Omolaboides*) *laesicollis* (Gyllenhal, 1839).

Subgenus *Dentatomolabus* Legalov subgen.n.

(figs. 53, 54)

Type species Attelabus conicollis Sharp, 1889

Description. Body red, red-brown or brown. Top smooth or sparsely punctured. Rostrum of average sizes, weakly curved or nearly so straight line. Eyes not convex or weakly convex from contour of head. Forehead narrow, weakly pressed. Elytra wide-oval. Humeri with teeth. Length of body: 3.0-7.0 mm.

Diagnosis. The new subgenus differs from other subgenera by the humeri with teeth.

Remarks. To this subgenus belong *Omolabus* (*Dentatomolabus*) *conicollis* (Sharp, 1889), *O. (D.) lituratus* Voss, 1938, *O. (D.) rugicollis* (Jekel, 1860) and *O. (D.) tabascoensis* (Voss, 1925).

Subgenus *Omolabus* s. str.

Remarks. To this nominate subgenus belong

Omolabus (s. str.) *angulipennis* (Sharp, 1889), *O. (s. str.) bifoveatus* (Jekel, 1860), *O. (s. str.) innotatus* Voss, 1928 and *Omolabus* (s. str.) *ujhelyiensis* Legalov sp.n.

Omolabus (s. str.) *ujhelyiensis* Legalov sp.n.

(figs. 48, 49, 56, 57, 109)

Holotype. Male (HNHMB), Columbia, Ujhelyi, Sierra S. Lorenzo.

Paratype. 1 Female (SZMN), idem.

Description. Male: Body dark brown reddish outflow. Abdomen more light. Rostrum of average sizes, weakly curved, strongly widening to apex, roughly punctured. Prementum with two lamellate teeth. Antennae attached before the middle of rostrum. Eyes weakly convex, convex from contour of head. Forehead flat, densely punctured. Vertex rugosity punctured. Temples lengthened. Antennae short. Scapus and first segment of funicle wide - oval, much wider than funicle. 2-7 segments oval. Clava large, lengthened. Pronotum strongly transversal, almost trapezoid, with weakly rounded sides. Disk convex, roughly transversal - wrinkled, with convexity on the middle and two deepenings. Elytra wide with rough sculpture. Humeri prominent convex. Intervals convex, wrinkled. Striae deep. Points in them rough. Abdomen convex, roughly dots. Legs long. Forward legs lengthened. Profemora rugosity punctured. Protibiae almost direct, wide. Meso- and metatibiae shorter, biconcave. Length of body: 4.8 mm. Female: Rostrum shorter. Prementum without blades. Antennae shorter. Protibiae shorter. Length of body: 4.8 mm.

Diagnosis. This new species is close to *Omolabus* (s. str.) *bifoveatus* (Jekel, 1860) but differs by the larger size, more transversal pronotum, more gen-

tle punctated pronotum and smooth intervals of the elytra.

Distribution. Columbia.

Subgenus *Perulabus* Legalov subgen.n.

(figs. 50, 63, 106)

type species *Omolabus (Perulabus) peruanus* Legalov sp.n.

Description. Body black with reddish outflow. Elytra and abdomen yellow. Scapus, funicle and tarsi red. Scutellum red - brown. Rostrum short, finely punctured. Antennae attached in first third of rostrum. Prementum with two small teeth. Bottom of rostrum with carina. Forehead narrows, flat with two longitudinal striae. Eyes strongly convex. Pronotum strongly transversal, trapezoid. Disk convex, finely and sparsely punctured. Elytra narrowed to apex. Humeri prominent convex. Intervals wide. Striae weak. Abdomen convex, on the middle with deepening on 1-3 ventrites. Legs long. Forward legs lengthened. Femora narrow. Length of body: 6.0 mm.

Diagnosis. This new subgenus is similar to nominate subgenus but differs by the long, strongly curved, narrow protibiae of males, and also two-colour body.

***Omolabus (Perulabus) peruanus* Legalov sp.n.**

(figs. 50, 63, 106)

Holotype. Male (MZLU), Peru, Loreto, Iquitos, Barillal, 10.II.1984, L. Huggert.

Description. Male: Body black with reddish outflow. Elytra and abdomen yellow. Scapus, funicle and tarsi red. Scutellum red - brown. Rostrum short, thick, weakly curved, finely punctured. Antennae attached in first third of rostrum. Prementum with two small teeth. Bottom of rostrum with carina. Forehead narrows, flat with two longitudinal striae. Eyes strongly convex. Vertex finely wrinkled. Temples lengthened. Pronotum strongly transversal, trapezoid, weakly narrowed to apex. Disk convex, finely and sparsely punctured. Elytra narrowed to apex. Humeri prominent convex. Intervals wide. Striae weak. Metepisternum sparsely and finely punctured. Abdomen convex, on the middle with deepening on 1-3 ventrites. Legs long. Forward legs lengthened. Femora narrow. Protibiae long, narrow, strongly curved. Length of body: 6.0 mm.

Distribution. Peru.

Subgenus *Sternolabus* Jekel, 1860

Attelabus sect. *Sternolabus* Jekel, 1860: 194

Type species: *Attelabus longirostris* Jekel, 1860; original designation

Remarks. To this subgenus belong 8 species (*Omolabus (Sternolabus) callifer* Voss, 1925, *O. (S.) callosus* (Sharp, 1889), *O. (S.) columbiensis* Voss, 1943, *O. (S.) curticornis* Voss, 1929, *O. (S.) jekelii* (Kirsch, 1870), *O. (S.) ligulatus* (Sharp, 1889), *O. (S.) longirostris* (Jekel, 1860), *O. (S.) subaeneus* Voss, 1929).

Subgenus *Pseudomolabus* Legalov subgen.n.

type species *Omolabus subrugosus* Voss, 1925 (figs. 55, 60, 110)

Description. Body red - brown or black. Top smooth, sparsely punctured or very weakly wrinkled. Prementum with two large teeth of males. Humeri strongly convex. Elytra wide - oval. Length of body: 2.8-6.0 mm.

Diagnosis. This new subgenus is very close to subgenus *Neomolabus* Legalov subgen.n. but differs the pronotum without protuberances. From subgenus *Sternolabus* Jekel, 1860 but differs by the absence lengthened convexity behind humeri.

Remarks. To this new subgenus belong *Omolabus (Pseudomolabus) bowringi* Voss, 1938, *O. (P.) plaumannii* Voss, 1938 and *O. (P.) subrugosus* Voss, 1925.

Subgenus *Neomolabus* Legalov subgen.n.

type species *Omolabus gibbiphorus* Voss, 1925

Description. Colouring red. Head, pronotum and elytra in part black or red - brown. Sides of pronotum and elytra more dark. Antennae, protibiae, back legs and abdomen red. Eyes strongly convex. Rostrum longer than head of males. Pronotum equal length and width. Disk with protuberance at pronotal groove or with protuberance on the middle and two flattened protuberances on each side, finely punctured. Elytra narrowed more or less strongly to apex. Length of body: 3.4-5.0 mm.

Diagnosis. This subgenus is similar to subgenus *Pseudomolabus* Legalov subgen.n. but differs by the pronotum with protuberances.

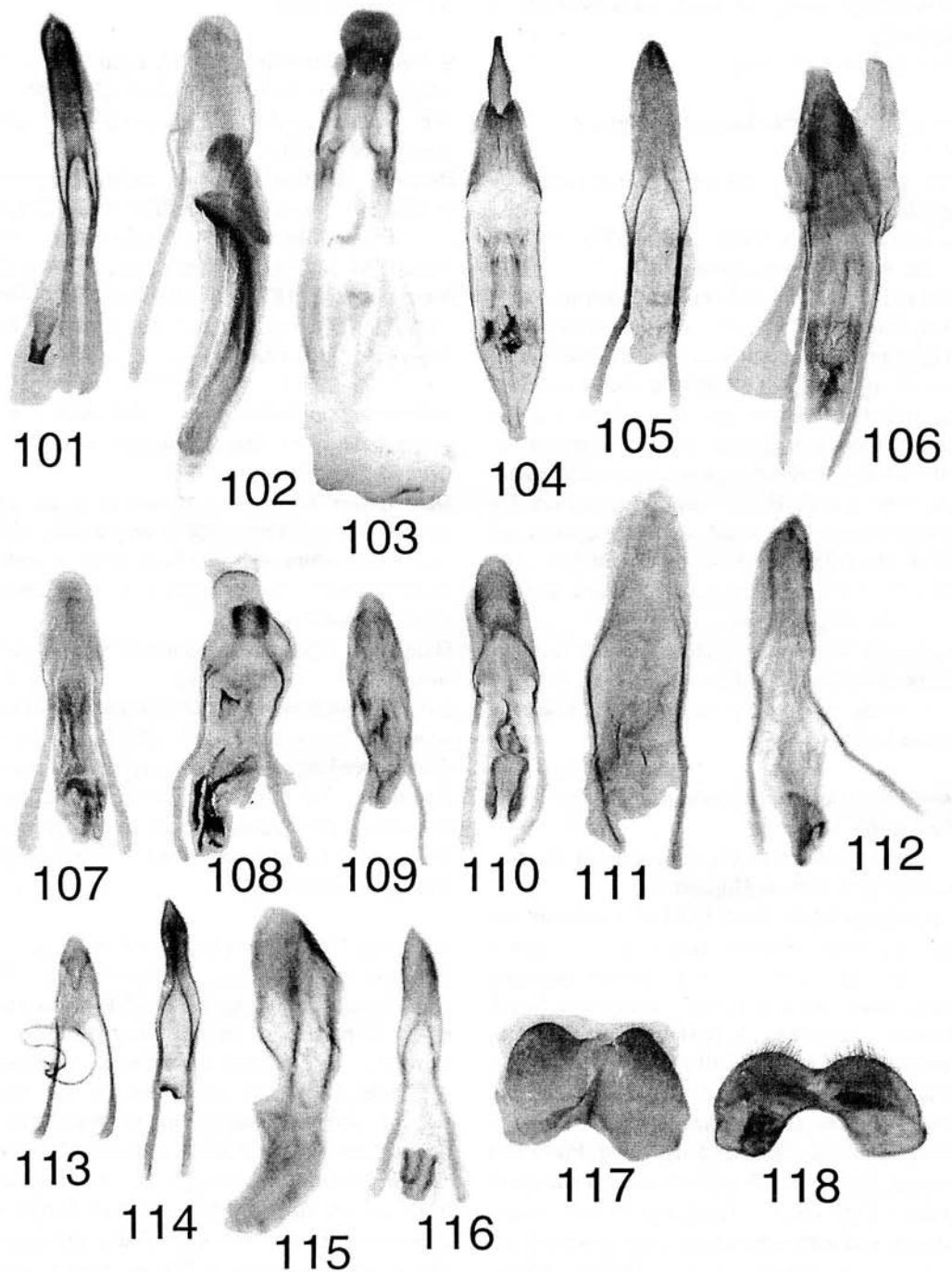


Fig. 101 - 118.

Remarks. The description of this new subgenus as *Omolabus gibbiphorus* and *O. bigibbicollis* in Voss (1925) on page 290-291. To this subgenus belong *Omolabus (Neomolabus) bigibbicollis* Voss, 1925, *Omolabus (Neomolabus) biimpressus* Voss, 1943 and *O. (N.) gibbiphorus* Voss, 1925.

Tribe Attelabini Billberg, 1820

Subtribe Attelabina Billberg, 1820

Genus *Cyrtolabus* Voss, 1925

Cyrtolabus chinensis Legalov sp.n.

(figs. 68, 73, 115)

Holotype. Male (MNHB), China, Jiangxi, "Kiang-Si, T'en-gan".

Paratype. 1 Male (SZMN), idem.

Description. Male: Body dark blue with metallic lustre, naked. Bottom of head with protuberances. Rostrum short, widening to apex, finely and sparsely punctured. Place of attachment of antennae located before the middle of rostrum. Forehead wide, flat, with two striae. Eyes large, strongly convex. Vertex convex, rugosity punctured. Antennae short both thick. Scapus and the first segment oval. Second - seventh segments almost round. Clava large, weakly pointed. Pronotum wide, transversal, with weakly rounded sides. Disk convex, densely and roughly punctured, before basis wrinkled. Elytra with rough sculpture, wide, little bit wider than length. Humeri weakly convex. Intervals wide, roughly punctured. Striae narrow with fine points. Abdomen convex, weakly flattened on the middle. First - third ventrites narrow. Fourth and fifth ventrites narrower. Pygidium convex, densely punctured. Legs long. Profemora fine teeth. Protibiae longer, almost direct. Meso- and metatibiae biconcave, shorter. Length of body: 3.8 mm.

Diagnosis. This new species differs from other species of this genus by the finer size, thick and larger punctured pronotum (figs. 68, 69, 73, 74), rough sculpture of the elytra and armament of the endophallus.

Distribution. South-Eastern China.

Subtribe Paramecolabina Legalov, 2003

Genus *Henicolabus* Voss, 1925

Subgenus *Jekelilabus* Legalov, 2003

Henicolabus (Jekelilabus) thailandicus Legalov sp.n.

(figs. 72, 75)

Holotype. Female (CKJU), Thailand bor., PAI, 22-29.V.1996, A. Kudrna.

Description. Female: Body red - brown. Scapus and funicle of antennae yellow. Clava red with grey setae. Apex of tibiae, tarsi, two maculae on pronotum and six maculae on elytra black. Rosstrum short, thick, widening to apex, sparsely punctured. Forehead wide, flat, with 3 longitudinal striae. Eyes convex, large. Vertex convex, finely punctured. Antennae short. Clava stupid. Pronotum transversal, with weakly rounded sides. Disk convex, smooth. Elytra almost rectangular. Greatest width on the middle. Humeri weakly smoothed. Intervals flat, smooth. Striae clear. Points in them large. Abdomen convex. Legs long. Profemora thick, without tooth. Meso- and metafemora more thin. Protibiae almost direct, largely jagged on internal edge, about mucro and uncus. Meso- and metatibiae shorter which more poorly have been jagged. Tarsi long. Length of body: 5.8 mm.

Diagnosis. This new species differs from other species of subgenus *Jekelilabus* Legalov, 2003 by the red clava of antennae, weak maculae on the pronotum and elytra, and black apex of tibiae (figs. 72, 75, 78, 79).

Distribution. Thailand.

Henicolabus (Jekelilabus) kresli Legalov sp.n.

(figs. 70, 71, 80, 112)

Holotype. Male (CKJU), Nepal mer., Sauraha, near Chitwan N.P., 4-6.VI.1999, P. Kresl.

Paratype. 1 Male (SZMN), idem.

Diagnosis. This new species is close to *Henicolabus (Jekelilabus) octospilotus* (Jekel, 1860) but differs by the larger size (6.0-6.1 mm), more poorly pointed penis and armament of the endophallus. Body red - brown. Clava of antennae, tibiae, tarsi, two maculae on pronotum and six maculae on elytra black.

Distribution. Nepal.

Tribe *Euscelophilini* Voss, 1925

Genus *Trachelolabus* Jekel, 1860

Trachelolabus fasciatus (Zhang, 1993) comb.n.

Himatolabus fasciatus Zhang, 1993: 199

Distribution. China (Xinjiang).

***Trachelolabus floridus* (Zhang, 1993) comb.n.**

Himatolabus fasciatus Zhang, 1993: 198

Distribution. China (Xinjiang).

***Trachelolabus longispinus* (Zhang, 1993) comb.n.**

Himatolabus longispinus Zhang, 1993: 197

Distribution. China (Yunnan).

Subfamily Apoderinae Jekel, 1860

Tribe Clitostylini Voss, 1926

Subtribe Allapoderina Legalov, 2003

Genus *Allapoderus* Voss, 1927

Subgenus *Allapoderus* s. str.

***Allapoderus* (s. str.) *multicolor* (Hustache, 1925) comb.n.**

Apoderus multicolor Hustache, 1925: 299

Distribution. Congo.

Tribe Hoplapoderini Voss, 1926

Subtribe Hoplapoderina Voss, 1926 (fig. 98)

Genus *Paroplwapoderus* Voss, 1926

Paroplwapoderus Voss, 1926: 15 (fig. 99)

Type species: *Apoderus fallax* Gyllenhal, 1839

Subgenus *Gomadaranus* Kano, 1930 stat.res.

Paroplwapoderus subgenus *Gomadaranus* Kano, 1930: 48

Type species: *Apoderus vitticeps* Jekel, 1860

Remarks. Earlier given subgenus was considered as synonym of the nominative subgenus (Voss, 1958, Legalov, 2003). Presence of teeth on humeri and form of basal scleritis of the endophallus allow to restore its status. To this subgenus belong *Paroplwapoderus* (*Gomadaranus*) *biangulatus* Voss, 1928, *P. (G.) bituberculatus* Voss, 1926, *P. (G.) lefroyi* (Marshall, 1913), *P. (G.) malaisei* Marshall, 1948, *P. (G.) nigriceps* Legalov, 2003, *P. (G.) obtusus* Voss, 1926, *P. (G.) punctatus* Pic, 1928, *turbidus* Voss, 1926, *P. (G.) tzinpinensis* Legalov, 2003, *P. (G.) vanvolxemi* (Roelofs, 1875) and *P. (G.) vitticeps* (Jekel, 1860)

Paropapoderus* (*Gomadaranus*) *rasuwanius

Legalov sp.n. (figs. 81, 85, 102)

Holotype. Male (CKJU), N Nepal, Rasuwa distr.,

way from Sing Gompa to Dhunche, Langtang Nat. Park, 2000-3200 m, 19.V.2001, P. Kresl.

Description. Male: Body red - yellow. Basis of elytra and pronotum red - brown. Top of head, big macula on disk of pronotum, pronotal groove, scutellum, 12 maculae on elytra, part of prothorax, mesothorax and metathorax, part of meso- and metacoxae, first - third ventrites, 3 maculae on fourth ventrite, two macula on each tergite, large macula on pygidium black. Head wide. Rostrum short. Forehead wide, flat, with 3 longitudinal striae. Eyes large, strongly convex. Vertex separated from forehead by transversal striae, convex. Antennae short. Scapus large, much longer also to thickness 1 and 2 segments. Clava weakly pointed. Pronotum campaniform, weakly transversal. Disk weakly convex, roughly rugosity punctured. Postnotal groove sharp. Scutellum large. Elytra widening to apex. Greatest width behind the middle. Humeri convex, with small tooth. Two large protuberances settle down before the middle of elytra. Very weak protuberances on 4 interval on first quarter of elytra. Intervals weakly convex, wide, densely punctured. Metepisternum densely rugosity punctured. Abdomen convex, densely and largely punctured. First - third ventrites wide. Fourth and fifth ventrites narrow. Pygidium convex, densely punctured. Legs long. Femora widened. Protibiae almost direct. Meso- and metatibiae biconcave. Length of body: 6.7 mm.

Diagnosis. This new species is similar to *Paropapoderus* (*Gomadaranus*) *punctatus* Pic, 1928 and *P. (G.) turbidus* Voss, 1926 but differs the other colouring, larger size and armament of the endophallus.

Distribution. Nepal.

Subgenus *Erycapoderus* Voss, 1926

***Paropapoderus* (*Erycapoderus*) *angulipennis* *shaanxinsis* Legalov ssp.n. (figs. 93, 94)**

Holotype. Female (CKJU), China, Shaanxi prov., Haozhenhi env., 1350-2000 m, 14-24.VI.1999, S. Murzin.

Diagnosis. This new subspecies is close to nominate subspecies but differs by the larger size (6.1 mm), wider pronotum, more smoothed penul-

timate and lamellate interval. Body brown. Top of the head, funicle of antennae, tibiae, tarsi, basis of pronotum, basic part of elytra dark (figs. 93-95, 97).

Distribution. China (Shaanxi).

Genus *Agomadaranus* Voss, 1958 stat.n. (fig. 100)

Paroplapoderus subgenus *Agomadaranus* Voss, 1958: 15

Type species: *Apoderus pardalis* Snelle van Vollenhoven, 1865

Remarks. Earlier given taxa was considered as subgenus of the genus *Paroplapoderus* (Voss, 1958, Legalov, 2003). Apomorphic characters (directed inside teeth on humeri of females, form of the aedeagus and strongly reduced basal sclerites of the endophallus) allow to change its rank.

To this genus belong two subgenera with 24 species: *Agomadaranus* (s. str.) *bihumeratus* (Jekel, 1860) comb.n., *A.* (s. str.) *hauseri* (Voss, 1930) comb.n., *A.* (s. str.) *melanostictoides* (Legalov, 2003) comb.n., *A.* (s. str.) *melanostictus* (Fairmaire, 1878) comb.n., *A.* (s. str.) *parbihumeratus* (Legalov, 2003) comb.n., *A.* (s. str.) *pardalis* (Snelle van Vollenhoven, 1865) comb.n., *A.* (s. str.) *pardaloides* (Voss, 1924) comb.n., *A.* (s. str.) *shirakii* (Kāno, 1930) comb.n., *A.* (s. str.) *sticticus* (Voss, 1926) comb.n., *A.* (s. str.) *subspinosis* (Voss, 1929) comb.n., *A.* (s. str.) *tandjongicus* (Voss, 1926) comb.n., *A.* (s. str.) *breviceps* (Voss, 1926) comb.n., *A.* (s. str.) *coniceps* (Voss, 1926) comb.n., *A.* (s. str.) *kryzhanovskyi* (Legalov, 2003) comb.n., *A.* (s. str.) *perakensis* (Voss, 1935) comb.n., *A.* (s. str.) *armatus* (Voss, 1926) comb.n., *A.* (s. str.) *bistriospinosus* (Faust, 1894) comb.n., *A.* (s. str.) *semiannulatus* (Jekel, 1860) comb.n., *A.* (s. str.) *proximus* (Voss, 1926) comb.n. and *A.* (*Pseudmadaranus*) *fasciatus* (Voss, 1928) comb.n.

***Agomadaranus* (s. str.) *kresli* Legalov sp.n.**

(figs. 82, 96)

Holotype. Female (CKJU), N Nepal, Rasuwa distr., Brabal env., Langtang Nat. Park, 2300 m, 15.V.2001, P. Kresl.

Diagnosis. This new species is close to *A.* (s. str.) *breviceps* (Voss, 1926) but differs by the well ad-

vanced internal teeth on humeri of females, wider head and more dark clava of antennae.

Body yellow red - brown. Head more dark. Macula on forehead, two temples, bottom of head and neck, two maculae on disk of pronotum, on two maculae on sides of pronotum, 3 maculae on scutellum, on 10 maculae on elytra, 1 macula on profemora, two maculae on meso- and metafemora, part of thorax and metepisternum, large macula on each side ventrites, large macula on pygidium black. Length of body: 8.4 mm.

Distribution. Nepal.

Agomadaranus* (s. str.) *sticticus yannanicus

Legalov ssp.n. (figs. 76, 87, 91, 92)

Holotype. Female (ZMAS), China, Yunnan, 30 km SW of Tzin'pin, 420-500 m, 20.IV-2.V.1956, Khuan Ke-zhen'.

Paratypes. 1 Female (ZMAS), 2 Females (SZMN), idem.

Description. Female: Body red - brown. Macula on forehead, two temples, bottom of neck, two maculae on disk of pronotum, on two maculae on sides of pronotum, 1 macula on middle of scutellum, on 10 maculae on elytra, 1 macula on procoxae, macula on sides of meso- and metathorax, macula on metepisternum, two small maculae on pygidium black. Head lengthened. Forehead wide, convex with 3 striae. Temples rounded. Vertex finely wrinkled. Antennae short and narrow. Pronotum strongly transversal, campaniform. Disk convex, roughly rugosity punctured. Elytra wide, for scutellum pressed. Greatest width behind the middle. Humeri with large tooth. Intervals granulated. 6, in part 9 and penultimate intervals carinate. Striae deep. Metepisternum densely punctured. Abdomen convex, finely and densely punctured. Pygidium roughly punctured. Femora widened. Tibiae bi-concave. Length of body: 7.4-8.2 mm.

Diagnosis. This new subspecies differs from other subspecies by the abdomen without black maculae.

Distribution. China (Yunnan).

Agomadaranus* (s. str.) *sticticus continentalis

Legalov ssp.n. (figs. 77, 84, 86, 89, 90, 103)

Holotype. Male (ZMAS), Vietnam, Kuk, Dangkhe island, 22-23.III.1987, I. Darevsky.

Paratypes. 1 Female (SZMN), Vietnam, Buen-Loi, 30.VI.1981, L. Medvedev; 1 Female (ZMAS), Vietnam, Buen-Loi, 12.VI.1985, L. Medvedev; 1 Female (SZMN), Vietnam, Buen-Loi, VI.1980, L. Medvedev; 1 Female (ZMAS), Vietnam, 12 km NO of Buon-Met-Huot, 22.VI.1985, L. Medvedev.

Diagnosis. This new subspecies is close to nominate subspecies but differs by the finer size and weaker teeth on humeri. Body yellow - red. Macula on forehead, two maculae on disk of pronotum, on two maculae on sides of pronotum, 1 macula on middle of scutellum, on 9 maculae on elytra, including on tooth on humeri and on protuberances, 1 macula on mesocoxae, maculae on sides meso- and metathorax, macula on metepisternum, maculae on each side 2 and third ventrites, two small maculae on pygidium black. Length of body: 7.9 mm (male), 7.2-7.4 mm (female).

Distribution. Vietnam.

Subgenus *Pargomadaranus* Legalov subgen.n. (figs. 83, 88)

Type species: *Apoderus spiniferus* Roelofs, 1880
Diagnosis. This new subgenus differs from other subgenera by the protibiae about mucro directed outside of males, reduced internal teeth on humeri of females, pygidium without maculae and usually black colouring.

Remarks. The description as group 3 of the genus *Paroplapoderus* in Voss (1926) on page 56-59. To this new subgenus belong *Agomadaranus* (*Pargomadaranus*) *amoenus* (Voss, 1926) comb.n., *A. (P.) basalis* (Voss, 1926) comb.n., *A. (P.) maculipes* (Voss, 1926) comb.n. and *A. (P.) spiniferus* (Roelofs, 1880) comb.n.

Compsapoderus (s. str.) *erythrogaster* (Snelle van Vollenhoven, 1865)

Apoderus erythrogaster Snelle van Vollenhoven, 1865: 165

Apoderus foveipennis Suffrian, 1870: 228 syn.n.
Remarks. I have studied photos of lectotype *Apoderus foveipennis* Suffrian, 1870 of collection IZH. This beetle is synonym *Compsapoderus* (s. str.) *erythrogaster* (Snelle van Vollenhoven, 1865) from Japan.

Distribution. Japan.

ACKNOWLEDGEMENT

This paper was financially supported by grant competition of youth projects of the Siberian Branch of the Russian Academy of Science No 70, the prize of the European Academy for young scientists of Russia for 2003 and the grant of Russian Science Support Foundation for 2004.

I wish to thank Dr. K.S. Baikov (Novosibirsk), Mr. M.V.L. Barclay (London), Dr. R. Danielsson (Lund), MSc. A.-L.-L. Friedman (Tel Aviv), Dr. J. Frisch (Berlin), Prof. R. Hamilton (Chicago), Dr. F. Hieke (Berlin), Dr. Zh. Hongbin (Beijing), Dr. B.A. Korotyaev (Saint-Petersburg), Ing. P. Kresl (Janovice nad Uhlavou), Dr. D.V. Logunov (Manchester), Dr. O. Merkl (Budapest), Ms. Zh. Mishagina (Novosibirsk), Dr. J. Pelletier (Monnaie), Dr. M. Schmitt (Bonn), Dr. K. Schneider (Halle), Mr. R.T. Thompson (London), Dr. K. Ulmen (Bonn), Dr. P. Ja. Ustjuzhanin (Novosibirsk), Dr. B. Viklund (Stockholm) for help in the work.

REFERENCES

- Bajkov K.S. 1999. Bases of modelling of phylogenesis on method SYNAP. Novosibirsk. 95 pp.
- Gebler F.A. 1830. Bemerkungen über die Insekten Sibiriens, vorzuglich des Altai in G.F. Ledebourys Reise durch Altai Gebirge und die Soongorische Kirgisen Steppe. II. Berlin. 228 pp.
- Herbst J.F.W. 1783. Kritisches Verzeichniss meiner Insecten-Sammlung. Archiv der Insectengeschichte 4: 1-72.
- Hustache A. 1923. Curculionides de l'exploration Lizer-Delétang au Chaco bolivien. Anales de la Sociedad Cientifica Argentina 96: 38-39
- Hustache A. 1925. Nouveaux *Apoderus* de l'Afrique équatoriale (Col. Curculionidae). Bulletin de la Société Entomologique de France 1-21: 296-299.

- Jekel H. 1860. Insecta Saundersiana: or characters of undescribed insects in the collection of William Wilson Saunders, Esq. Coleoptera. Curculionoides 2. London: John van Voorst: 155-244.
- Kâno H. 1930. Die Apoderinen aus dem Japanischen Reich. Journal of the Faculty of Agriculture, Hokkaido Imperial University. Sapporo 29(2): 37-83.
- Legalov A.A. 2001. Revision der holarktischen Auletini (Coleoptera, Attelabidae) // Russian Entomological Journal 10 (1): 33-66.
- Legalov A.A. 2002a. The genesis and phylogenetic relationships of the leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) // Biological science and formation in pedagogical high schools. Novosibirsk 2: 104-111 (In Russian)
- Legalov A.A. 2002b. Revision der Gattung *Auletes* Schoenherr (Coleoptera, Rhynchitidae, Auletini) // Bulletin de l'Institut royal des sciences naturelles de Belgique, Entomologie 72: 175-180.
- Legalov A.A. 2003a. New taxa of Rhynchitidae (Coleoptera) from West Palaearctic // Eurasian Entomological Journal 2 (1): 69-73. (In Russian)
- Legalov A.A. 2003b. Reconstruction of phylogenetic relationships of the leaf-rolling weevils (Coleoptera: Attelabidae) // Biological science and formation in pedagogical high schools. Novosibirsk 3: 27-33. (In Russian).
- Legalov A.A. 2003c. Taxonomy, classification and phylogeny of the leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) of the world fauna. Novosibirsk. CD-ROM. (641 Mb) 733 pp. (In Russian with english diagnosis)
- Legalov A.A. 2003d. Cheklist of the leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) of the world fauna (117 pp.) // Taxonomy, classification and phylogeny of the leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) of the world fauna. Novosibirsk. CD-R. (641 Mb.)
- Legalov A.A. 2003e. Diagnoses of new taxa described in "Legalov A.A. 2003. Taxanomy, classification and phylogeny of leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) of the world fauna. Novosibirsk. CD-R. 733 pp. (641 MB.)". Novosibirsk: Kapitel. 27 pp.
- Legalov A.A. 2003i. Phylogeny of Family Rhynchitidae (Coleoptera: Rhynchitidae) // Materialy konferençii molodykh uchenykh SO RAN, posvjashennoi M.A. Lavrent'evy. Chast 2. Nauki o zhizni, nauki o zemle, ekonomicheskie nauki, gumatitarnye nauki. Novosibirsk: Prais-kur'yer.: 86-89. (In Russian)
- Marshall G.A.K. 1948. Entomological results from the Swedish expedition 1934 to Burma and British India. Coleoptera: Curculionidae. Novitates Zoologicae 42: 430-473.
- Snellen van Vollenhoven S.C. 1865. Beschrijving van eenige nieuwe soorten van Curculioniden, uit het geslacht *Apoderus* Oliv. Nederlandsch Tijdschrift voor de Dierkunde 2: 158-167.
- Suffrian E. 1870. Verzeichniss der Dr. Gundeach auf der Insel Cuba gesammelt Rüsselkäfern. Archiv für Naturgeschichte 1: 150-234.
- Voss E. 1924. Einige bisher unbeschriebene Attelabiden aus dem tropischen Asien und Indomalayische Archipel (15. Beitrag zur Kenntnis der Curculioniden). Entomologische Blätter 20 (1): 34-46.
- Voss E. 1925. Die Unterfamilien Attelabinae und Apoderinae (Col. Curc.) (18. Beitrag zur Kenntnis der Curculioniden). Stettiner Entomologische Zeitung 85 (1-2): 1-78, 191-304.

Voss E. 1926. Die Unterfamilien Attelabinae und Apoderinae. II. Apoderinae (Col. Curc.) (18. Beitrag zur Kenntnis der Curculioniden). Stettiner Entomologische Zeitung 87 (1): 1-89.

Received: 04.03.2004.

Accepted: 09.05.2004.

Voss E. 1936. Nachträgliches zu: "Die Cossoninen Afrikas und Madagassars des Deutschen Entomologischen Instituts der Kaiser Wilhelm-Gesellschaft (63. Beitrag zur Kenntnis der Curculioniden). Arbeiten über morphologische und taxonomische Entomologie aus Berlin-Dahlem 3: 296-298.

Voss E. 1938. Beschreibung neu bekannt gewordener Attelabinen aus der neotropischen Region (Col.). Revista de Entomologia 8 (1-2): 153-161.

Voss E. 1940. Über Rüsselkäfer der indomalayischen Subregion, vorwiegend von Java (Col., Curc.) (82. Beitrag zur Kenntnis der Curculioniden). Tijdschrift Entomologie 83: 17-93.

Voss E. 1943. Nachträglich bekannt gewordene exotische Attelabinen und Apoderinen (Col. Curculionidae) (103. Beitrag zur Kenntnis der Curculioniden). Revue Francaise d'Entomologie 10: 29-34.

Voss E. 1953. Über einige in Fukien (China) gesammelte Rüssler. IV. (Col. Curc.) (114. Beitrag zur Kenntnis der Curculioniden). Entomologische Blätter 49: 42-82.

Voss E. 1958. Ein Beitrag zur Kenntnis der Curculioniden im Grenzgebiet der orientalischen zur Palaarktischen Region (Coleoptera, Curculionidae). Die von J. Klapperich und Tschung Sen in der Provinz Fukien gesammelten Rüsselkäfer (132. Beitrag zur Kenntnis der Curculioniden). Decheniana. Bonn: Beihete 5: 1-139.

Zhang X. 1993. Three new species of the genus *Himatolabus* Jekel (Coleoptera: Attelabidae). Sinozoologia 10: 197-200. (In Chinese).