# Contribution to a revision of the weevil genus Brachysomus Schoenh. (Coleoptera: Curculionidae: Entiminae). Description of new taxa 

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# Материалы к ревизии долгоносиков рода Brachysomus Schoenh. (Coleoptera: Curculionidae: Entiminae). Описание новых таксонов 

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#### Abstract

The genus Brachysomus Schoenherr, 1823 is revised. In the first part of the revision, 18 new species are described: B. (s. str.) simplex sp. n. (Macedonia), B. (s. str.) dubius sp. n. (Bosnia and Herzegovina), B. (s. str.) subtilis sp. n. (Serbia and Montenegro), B. (s. str.) mucronatus sp. n. (Serbia and Montenegro), B. (s. str.) hegyessyi sp. n. (Hungary), B. (Hippomias) pelex sp. n. (Greece), B. (H.) assingi sp. n. (Turkey), B. (H.) simulans sp. n. (Greece), B. (H.) boroveci sp. n. (Greece), B. (H.) armatus sp. n. (Turkey), B. (H.) curvimanus sp. n. (Turkey), B. (H.) fallax sp. n. (Greece), B. (Hippomias) argutus sp. n. (Serbia and Montenegro), B. (H.) alexeevi sp. n. (Russia: Central Caucasus), B. (H.) merkli sp. n. (? Romania), B. (H.) tenuicollis sp. n. (Hungary), B. (H.) ellipticus sp. n. (Russia: Western Caucasus), B. (H.) kovali sp. n. (Georgia: Western Caucasus). A subgeneric classification is proposed. A new subgenus Hippomias subgen. n. (type species Brachysomus kubanensis Reitter, 1888) is erected.


Key words. Coleoptera, Curculionidae, Entiminae, Brachysomus Schoenh., revision, new species, subgeneric classification.

Резюме. Выполнена ревизия рода Brachysomus Schoenherr, 1823. В первой части ревизии описываются 18 новых видов: B. (s. str.) simplex sp. n. (Македония), B. (s. str.) dubius sp. n. (Босния и Герцеговина), B. (s. str.) subtilis sp. n. (Сербия и Черногория), В. (s. str.) mucronatus sp. n. (Сербия и Черногория), B. (s. str.) hegyessyi sp. n. (Венгрия), B. (Hippomias) pelex sp. n. (Греция), B. (H.) assingi sp. n. (Турция), B. (H.) simulans sp. n. (Греция), B. (H.) boroveci sp. n. (Греция), B. (H.) armatus sp. n. (Турция), B. (H.) curvimanus sp. n. (Турция), B. (H.) fallax sp. n. (Греция), B. (Hippomias) argutus sp. n. (Сербия и Черногория), В. (H.) alexeevi sp. n. (Россия: Центральный Кавказ), B. (H.) merkli sp. n. (? Румыния), B. (H.) tenuicollis sp. n. (Венгрия), B. (H.) ellipticus sp. n. (Россия: Западный Кавказ), B. (H.) kovali sp. n. (Грузия: Западный Кавказ). Предложена подродовая классификация рода. Установлен новый подрод Hippomias subgen. n. (типовой вид Brachysomus kubanensis Reitter, 1888).
Ключевые слова. Coleoptera, Curculionidae, Entiminae, Brachysomus Schoenh., ревизия, новые виды, подродовая классификация.

## Introduction

Species of the genus Brachysomus Schoenherr, 1823 are distributed mainly in the Eastern Mediterranean Region. Their ranges are usually small. Numerous species live in the Balkans; another centre of wide species diversity of the genus Brachysomus are Carpathians, and several endemic species are restricted to Asia Minor and the Caucasus. Four Brachysomus species inhabit the Mountain Crimea but only one of them is endemic to the region. Holarctic range is known only for B. echinatus (Bonsd.) distributed over the vast territory from England to the Russian Far East and introduced in North America. The northern distribution limit of B. echinatus in the Palaearctic runs across Karelia, while the southern limit passes through Transcaucasia; they are the northern and southern limits of the range of the entire genus Brachysomus. Second in the range size is B. hirtus Boh., which occurs in all southern part of Europe from England to the Northwestern Caucasus. B. echinatus and B. hirtus have vast ranges owing to expansion of the parthenogenetic populations. B. echinatus is known only as a parthenogenetic form, while a bisexual form of B. hirtus was discovered in Dinaric Alps (Formánek, 1905). No parthenogenetic form of any of the rest species of Brachysomus is known.

The genus Brachysomus is believed to comprise about 35 species (Benedikt, 2001; Wanat, Mazur, 2005), but it actually includes only 30 species; five species have been transferred to other genera. A 12year study of the genus Brachysomus and related genera has resulted in a revision of this genus and a discovery of 18 species new to science.

This paper is dedicated to Gleb Sergeevich Medvedev, an eminent Russian coleopterist, the President of the Russian Entomological Society and the Head of the Laboratory of Insect Systematics of the Zoological Institute, Russian Academy of Sciences, on the occasion of his 75th birthday.

## Material and methods

For examination and preparation of specimens, a binocular microscope BSM-9 was used. Genital structures were macerated in hot $10 \% \mathrm{KOH}$, washed in distilled water and put in vials with glycerine. Illustrations of genital structures were made from glycerine preparations.

## List of depositories and acronyms

This study is based on material from the following museums and private collections willingly put at my disposal.

BNHM - Natural History Museum, London; DEI - Deutsches Entomologisches Institut, Müncheberg; IZ - Institute of Zoology, National Academy of Sciences, Kyiv; MCSNM - Museo civico di Storia naturale di Milano; MHNG - Muséum d’Histoire naturelle, Genève; MTMB - Magyar Természettudományi Múzeum, Budapest; NMP - Narodni muzeum, Praha; NMW - Naturhistorisches Museum, Wien; SMTD - Staatliches Museum für Tierkunde, Dresden; SNR - Sveriges Naturhistoriska Riksmuseet, Stockholm; UZMK - Universitetes Zoologiske Museum, København; ZIN - Zoological Institute, Russian Academy of Sciences, St. Petersburg; ZMUA - Zoölogisch Museum, Universiteit van Amsterdam; ZMUH - Zoological Museum, University of Helsinki; ZSM - Zoologische Staatssammlung, München; Bc - private collection of R. Borovec, Nechanice, Czech Republic; Fc - private collection of R.V. Filimonov, St. Petersburg; Sc - private collection of V.Yu. Savitsky, Moscow.

Depositories of the new species described in this paper are indicated in the text.
The following abbreviations are used in the text: L/W - length to width ratio, RL - length of rostrum, RW - width of rostrum, FW - width of frons, ELD - longitudinal diameter of eye, ETD - transverse diameter of eye, PL - length of pronotum, PW - width of pronotum, EL - length of elytra, EW width of elytra.

## Genus Brachysomus Schoenherr, 1823

## Subgenus Brachysomus Schoenherr, 1823

Type species Curculio hirsutulus Fabricius, 1792 = Curculio echinatus Bonsdorff, 1785.

## Brachysomus (s. str.) simplex Yunakov, sp. n. (Figs 1, 44, 45, 74, 117, 136)

Diagnosis. In appearance, the new species is similar to some Barypeithes Duv. but differs in the structure of head. From all species of the subgenus Brachysomus s. str. it may be distinguished by the very fine pubescence of body and shape of head. It is not possible to relate B. simplex $\mathrm{sp} . \mathrm{n}$. to any other species at present.

Description. Rostrum weakly narrowing to middle, then parallel-sided, as long as wide ( $\mathrm{RL} / \mathrm{RW}=1$ ). Pterygia clearly visible in dorsal view, but not projecting from lateral contour of rostrum. Rostral dorsum scarcely narrowing to middle, then parallel-sided, with shallow median sulcus, separated from frons by hardly visible in lateral view transverse depression. Epistomal plate weakly convex. Frons twice as wide as rostral dorsum near antennal insertion. Antennal scrobes narrowly visible, at base deep, gradually disappearing close to margin of ventral surface of rostrum, smoothly interflow with lateral surface of rostrum. Ventral margin of antennal scrobe distinct throughout its entire length. Dorsal margin of antennal scrobe parallel to rostral dorsum, ending at middle of rostrum. Eyes small ( $\mathrm{FW} / \mathrm{ELD}=2.36$ ), moderately convex, oval; situated in dorsal half of head capsule, moderately below level of frons, their dorsal margins separated from frons level by 0.57 ETD. Head finely and densely punctate dorsally, base of rostral dorsum finely shagreened.

Antennal scape thin, almost straight, sharply widened in apical third; 1st ( $\mathrm{L} / \mathrm{W}=1.75$ ) and $2 \mathrm{nd}(\mathrm{L} / \mathrm{W}=1.66)$ funicular segments elongate, 1st 1.40 times as long as 2nd, 3rd and 4th spherical, 5-7th transverse; club ovate.

Pronotum transverse ( $\mathrm{PL} / \mathrm{PW}=0.77$ ),


Fig. 1. Brachysomus simplex sp. n. evenly convex on disc and at sides, widest at middle, distinctly more deeply constricted at base than at apex. Disc finely reticulate; its sculpture consisting of dense fine polygonal punctures, with crosspieces somewhat narrower than diameter of a puncture; sides of pronotum finely granulate.

Elytra oval (EL/EW = 1.33), weakly, evenly convex at sides. Disc strongly convex in crosssection and moderately, almost evenly convex longitudinally. Striae linear. Interstriae shining, weakly convex, 3 times as wide as striae. Punctures deep, narrowly separated. Scutellum invisible.

Femora gently club-shaped swollen in middle part. Tibiae slender, not widened at apex. 1st segment of tarsus triangular, 2nd segment transverse ( $\mathrm{L} / \mathrm{W}=0.5$ ). Claw-segment by 0.60 extending beyond lobes of 3 rd segment. Claws connate, weakly divergent in apical part.

Body, antennae and legs light brown. Pubescence very thin. Head and pronotum sparsely clothed with light piliform scales. Interstriae of elytra evenly clothed with piliform scales and bearing short, fine, pointed, erect setae, their length somewhat less than interstriae width. Antennae, legs and ventrites with fine pubescence. Scape and funicle of antennae, tarsi and also inner margins of tibiae clothed with fine hairs.

Spermatheca as in Fig. 136.
Body length 2.35 mm , width 1.35 mm .
Material. Macedonia. Holotype: q, "Mazedonia, Sar Pl., Ljuboten, 4-18 VII 1935 (J. Fodor)" (MTMB).

Etymology. The name of this species refers to the lack of bright characters which obscures its affinities.

Brachysomus (s. str.) dubius Yunakov, sp. n. (Figs 2, 47, 75, 104, 111, 122, 161)
Diagnosis. The new species is closely related to B. hirtus Boh. (Figs 7, 122, 132, 161), differing in the shape and larger size of aedeagus and denser scaling. The anal ventrite of male is evenly convex (Fig. 111), not flattened in apical $1 / 3$ which is true for B. hirtus. The eyes are weakly convex, the rostrum is weakly narrowing apically, but not parallel-sided in contrast to B. hirtus (Figs 6, 48, 49) and B. fasciatus Strl. (Fig. 46).

Description. Rostrum conical, weakly narrowing apically, as long as wide. Pterygia clearly visible in dorsal view, but not projecting from lateral contour of rostrum. Dorsal surface of rostrum hardly narrowing to middle, then parallel-sided, convex longitudinally, with deep median sulcus, separated from frons by well-visible transverse depression. Epistomal plate with shallow depression. Antennal scrobes narrowly visible, deep. Eyes large (FW/ELD = 1.7), weakly and evenly convex, oval, situated in dorsal half of head capsule, considerably below level of dorsal margin of frons. Frons moderately convex, finely punctate.

Antennal scape thin, gently curved, sharply widened at apical $1 / 3$; 1st and 2 nd funicular segments elongate $(\mathrm{L} / \mathrm{W}=$ $2-2.3$ ), 1st noticeably larger than 2nd; 3rd-6th segments as long as wide; 7th transverse; club ovate or oblong-ovate.

Pronotum transverse ( $\mathrm{PL} / \mathrm{PW}=0.79$ ), with strongly evenly convex disc and sides, noticeably constricted at base and at apex, densely covered with large and shallow punctures. Disc usually with shallow lateral depressions.

Elytra oval (EL/EW =1.26). Disc strongly convex longitudinally. Striae linear, with punctures deep, narrowly separated; crosspieces somewhat narrower than a puncture, situated below interstrial level. Interstriae nearly flat, shining, twice as wide as striae. Scutellum almost invisible.

Femora gently club-shaped swollen in middle part. Protibia straight, slender, not widened at apex. Inner apical angle of metatibia distinctly acute, with small but noticeable mucro. 1st segment of tarsus triangular, 2nd segment as long as wide. Claw-segment by 0.60 extending beyond lobes of 3rd segment. Claws connate, weakly divergent in apical part.

Anal ventrite weakly evenly convex, without depression; apical margin almost straight.

Body brown, densely covered with grey elongate, shallowly excised apically recumbent scales and longer, evenly widened and blunted apically erect setae; setae as long as interstriae wide. Antennae and ventrites light brown with fine light pubescence; legs light brown with evenly widened apically setae.

Aedeagus heavily sclerotized, evenly narrowing apically (Fig. 161).

Body length 2.3 mm , width 1.25 mm .
 "Herzegowina, Domanovich, Reitter 79" (printed); "Brachysomus hispidus Redt." (handwritten); "G.C. Champion C., B.M. 1927-409" (printed) (BNHM).

Etymology. The name of this species refers to its misleading appearance which obscured identification of the holotype.


Fig. 2. Brachysomus dubius sp. n.

Brachysomus (s. str.) mucronatus Yunakov, sp. n. (Figs 3, 50, 51, 77, 96, 105, 132, 139, 165)
Diagnosis. The new species is closely related to B. fasciatus Strl., differing in the strong, long, stylet-shaped mucro on male metatibia, narrowing apically rostrum, less convex eyes, and in the structure
and shape of the genitalia of the both sexes (Figs 46, 50, 51, 96, 105, 138, 139, 163, 165). From B. hirtus, in addition to the above-listed characters, the new species differs in the more strongly curved antennal scape, small, strongly convex eyes (in B. mucronatus sp. n. FW/ELD $=2.5-3.0$, in $B$. hirtus FW/ELD $=$ 2). (Figs 78, 97, 106, 137, 164).

Description. Rostrum as long as wide, conically narrowing from base to middle, sides smoothly interflow with temples. Pterygia clearly visible in dorsal view, projecting from lateral contour of rostrum. Rostral dorsum weakly narrowing from base to middle, then parallel-sided, convex longitudinally, with deep median sulcus, separated from frons by noticeably visible in lateral and dorsal views transverse depression. Epistomal plate with shallow depression. Antennal scrobes narrowly visible, deep, reaching ventral surface of rostrum. Ventral margin of antennal scrobe distinct along its entire length, dorsal margin parallel to rostral dorsum, from near middle of rostrum directed to eye and ending before it. Eyes small (FW/ELD $=2.5-3.0$ ), oval, almost hemispherically convex, situated very high in head capsule nearly at frons level. Frons weakly convex, distinctly finely punctate.

Antennal scape thin, gently curved in basal $1 / 3$, sharply widened at apical $1 / 3$; 1st and 2 nd funicular segments elongate $(\mathrm{L} / \mathrm{W}=2.0-2.3)$, 1st noticeably larger than 2 nd ; 3rd-6th segments as long as wide; 7 th transverse; club ovate or ob-long-ovate.

Pronotum transverse ( $\mathrm{PL} / \mathrm{PW}=0.73-0.85$ ), strongly, evenly convex on disc and at sides, noticeably constricted at base and at apex, densely coarsely and shallowly punctate. Disc usually with shallow lateral depressions, occasionally also with very weak median longitudinal depression.

Elytra oval or broad-oval (in males $\mathrm{EL} / \mathrm{EW}=1.30-1.43$, in females $1.25-1.34$ ). Disc strongly convex longitudinally and weakly convex in cross-section. Striae linear, with punctures deep, narrowly separated. Crosspieces somewhat narrower than diameter of a puncture, situated below interstrial level. Interstriae nearly flat, shining, twice as wide as striae. Scutellum almost invisible.

Femora gently club-shaped swollen in middle part. Protibia slender, straight, usually not widened at apex. Inner apical angles of tibiae acutely produced, with strong, long stylet-shaped mucro. 1st segment of tarsus triangular, 2nd segment transverse $(\mathrm{L} / \mathrm{W}=0.50)$. Claw-segment by 0.60 extending beyond lobes of 3rd segment. Claws connate, weakly divergent in apical part.

Male anal ventrite without apical depression, its apical margin almost straight.
Body brown, densely covered with


Fig. 3. Brachysomus mucronatus sp. n. weakly shining, elongate, shallowly excised apically recumbent scales and longer, evenly widened, blunted apically, erect setae. Scales in males with noticeably bifurcate apices, in females apical parts of scales almost parallel. Length of setae equal to width of interstriae. Antennae and ventrites light brown with fine light pubescence, legs light brown, with evenly widened apically setae.

Aedeagus and spermatheca as in Figs 139 and 165 .

Body length 2.30-2.60 mm, width $1.10-$ 1.40 mm ; in holotype 2.30 and 1.10 mm , respectively.

Material. Serbia and Montenegro. Holotype: đ, "Dobrota, Juni 1916" (printed), "Collectio Dr Jureček, H. Jurečková" (printed) (NMP). Paratypes. 3 , some data as holotype (NMP); 1 q, "Cattaro (= Kotor), 10.7.1916", "Collectio Dr Jureček, H. Jurečková" (NMP); 1 §, 3 \&, "Boc.[ca] di Cattaro (= Boka Kotorska Strait), April, 1916" (NMP, ZIN); 3 \&, "Boc.[ca] di Cattaro, Rittm. Matcha", "Collectio Dr Jureček, H. Jurečková" (NMP); 1 §, 1 q, "Cattaro, Dal.[matia], 1916", "Brachysomus hirtus Boh." (NMP); 1 §, "Montenegro, Rittm. Matcha" (NMP); 1 §, 1 , "Dalmatia, J. Matcha" (NMP).

Etymology. The name of this species refers to the large mucro on male metatibia.

Brachysomus (s. str.) subtilis Yunakov, sp. n. (Figs 4, 5, 52, 76, 107, 133, 140, 162)
Diagnosis. The new species is closely related to B. fasciatus Strl. and B. hirtus, but differs in the shorter suberect setae on the interstriae of elytra (Figs 132, 133), indistinct median sulcus on the rostral dorsum (Figs 46, 48, 52), lack of lateral depressions on the disc of pronotum, and strong, long, styletshaped mucro on the male tibiae (Figs 96, 98, 106, 107).

Description. Rostrum parallel-sided, as long as wide; sides leveling with temples. Pterygia clearly visible in dorsal view, weakly projecting from lateral contour of rostrum. Rostral dorsum parallel-sided, strongly longitudinally convex, with deep median sulcus, separated from frons by clearly visible in lateral and dorsal views transverse depression. Epistomal plate with shallow depression. Antennal scrobes narrowly visible, deep, reaching ventral surface of rostrum. Eyes large (in males $\mathrm{FW} / \mathrm{ELD}=1.61-1.63$, in females $2.08-2.18$ ), oval, usually strongly, occasionally hemispherically convex. Frons weakly convex, distinctly finely punctate.

Antennal scape thin, gently curved, sharply widened at apical $1 / 3$; 1st and 2 nd funicular segments elongate $(\mathrm{L} / \mathrm{W}=$ $2.0-2.3), 1$ st as long as, but noticeably larger than 2 nd ; $3 \mathrm{rd}-6$ th segments as long as wide; 7 th transverse; club ovate.

Pronotum transverse ( $\mathrm{PL} / \mathrm{PW}=0.72-0.80$ ), widest at middle, with strongly, evenly convex disc and sides, noticeably constricted at base and apex, densely covered with coarse and shallow polygonal punctures.


Figs 4-7. Brachysomus Schoenh., body $(4,6)$ and scaling of elytra $(5,7) .4,5-B$. subtilis sp. n.; 6, 7-B. hirtus Boh.

Elytral shape broadly varying: from oblong- to broad-oval (in males $\mathrm{EL} / \mathrm{EW}=1.28-1.33$; in females $1.22-1.23$ ). Disc strongly convex longitudinally. Striae linear, with punctures deep, narrowly separated. Crosspieces somewhat narrower than a puncture, situated at interstrial level. Interstriae nearly flat, shining, twice as wide as striae. Scutellum scarcely visible.

Femora gently club-shaped swollen in middle part. Protibia slender, straight, usually not widened at apex. Inner apical angle of all tibiae noticeably acutely produced, with large stylet-shaped mucro. 1st segment of tarsus triangular, 2nd segment weakly transverse $(\mathrm{L} / \mathrm{W}=0.60)$. Claw-segment by 0.60 extending beyond lobes of 3 rd segment. Claws connate, weakly divergent in apical part.

Male anal ventrite without apical depression, but strongly flattened in apical $1 / 3$, widely rounded apically.
Body brown, densely covered with weakly shining, elongate, excised apically recumbent scales and shorter, weakly widened, blunted apically suberect setae. Scales on pronotum and head deeply, those on elytra weakly excised and broad. Sides of pronotum and interstriae of elytra very densely covered with scales. Setae 0.5 as long as interstriae wide. Antennae and ventrites light brown with fine light pubescence, legs light brown, with evenly widened apically setae.

Aedeagus and spermatheca as in Figs 140 and 162.
Body length $1.50-2.37 \mathrm{~mm}$, width $0.90-1.37 \mathrm{~mm}$; in holotype 1.92 and 1.00 mm , respectively.
Material. Serbia and Montenegro. Holotype: §, "Dobrota, Mai. 1916", "Collectio Dr Jureček, H. Jurečková" (NMP). P aratypes. 2 §̂, some data as holotype (NMP); 1 ㅇ, "Dobrota, Juni 1916", "Collectio Dr Jureček, H. Jurečková" (NMP); 13 §, 6 \& , "Boc.[ca] di Cattaro (= Boka Kotorska Strait), Rittm. Matcha" (NMP, ZIN); 2 §, 2 q, "Boc.[ca] di Cattaro, April, 1916" (NMP); 3 đ̃, "Cattaro (= Kotor), 10.7.1916", "Collectio Dr Jureček, H. Jurečková" (NMP); 1 ठ, "Cattaro", "U. Sahlb.[erg]", "1066", "Br. fasciatus var." (ZMUH); 8 §, 1 ㅇ, "Dalmatia, J. Matcha" (NMP); 1 §, "Montenegro westliches, Reitter" (NMP); 3 §ె, 1 q, "Cattaro, Dal.[matia], 1916", "Brachysomus hirtus Boh." (NMP).

Etymology. The name of this species refers to the small size of the gracious beetles.
Brachysomus (s. str.) hegyessyi Yunakov, sp. n. (Figs 8, 80, 141, 168)
Diagnosis. In a hypothetical morphological series, the new species is situated between B. setiger (Gyll.) (Figs 37-39, 175-177) and B. villosulus (Germ.) (Figs 35, 36, 178). In the structure of anal ventrite


Fig. 8. Brachysomus hegyessyi sp. n. and male genitalia, also in the type of body pubescence the new species is very similar to B. villosulus (Germ.), differing in the thin antennae, shorter erect setae on the elytra and pronotum, denser punctures in the elytral striae, broad tibiae, strongly transverse pronotum, and broad median lobe of the aedeagus. From B. setiger, the new species clearly differs in the sparse pubescence of female body, slight depression on the anal ventrite of male, and structure of the male genitalia.

Description. Rostrum parallel-sided, as long as wide. Pterygia clearly visible in dorsal view, weakly projecting from lateral contour of rostrum. Rostral dorsum strongly narrowing in basal $1 / 3$, then parallel-sided, weakly convex longitudinally, with shallow median sulcus, separated from frons by transverse depression. Epistomal plate scarcely convex, U-shape emarginated. Antennal scrobes narrowly visible, deep, reaching ventral surface of rostrum. Eyes large (in males FW/ELD = 1.66-1.86), oval, strongly convex. Frons flat, with distinct fine elongate punctures.

Antennae thin. Antennal scape gently curved, sharply widened in apical $1 / 3$. Funicle evenly widened apically. 1st ( $\mathrm{L} / \mathrm{W}=1.40$ ) and $2 \mathrm{nd}(\mathrm{L} / \mathrm{W}=1.25)$ funicular segments elongate; 3rd segment spherical, 4-7th weakly transverse; club broad spindle-shaped.

Pronotum strongly transverse ( $\mathrm{PL} / \mathrm{PW}=0.65-0.69$ ), widest at middle, strongly evenly convex on disc and at sides, noticeably constricted at base and at apex, densely covered with large shallow punctures, with weak apical constriction.

Elytra narrow- or broad-oval (in males $\mathrm{EL} / \mathrm{EW}=1.36-1.40$; in females $1.31-1.34$ ), at base as wide as base of pronotum. Base straight. Disc usually strongly convex longitudinally, occasionally slightly convex. Striae broad. Punctures deep, well separated. Crosspieces shorter than a puncture, situated below interstrial level. Interstriae convex, shining, as wide as striae. Scutellum very small but noticeable

Femora in males strongly, in females gently club-shaped swollen in middle part. Tibiae broad, straight, noticeably S-shaped and mucronate interiorly. Apical interior emargination of metatibia with dense brush of short, thin, light hairs. 1st segment of tarsus triangular, 2nd segment transverse ( $\mathrm{L} / \mathrm{W}=0.57$ ). Claw-segment by 0.6 extending beyond lobes of 3rd segment.

Anal ventrite of males with slight depression in apical part; apical margin shallowly emarginate, without distinct rosette of hairs, with only solitary hairs situated laterally. Anal ventrite of females evenly convex in middle, with apical margin narrowly rounded. Body shining, mid- to dark brown, antennae and legs yellow to light brown, head mostly dark brown to black. Elytra sparsely covered with white or light grey short narrow-lanceolate, slightly C-shaped scales and long spineshaped erect setae, those as long as interstriae wide. Head and pronotum more densely covered with scales and shorter setae. Antennae and legs covered with weakly widened and blunted apically thick setae.

Aedeagus and spermatheca as in Figs 141 and 168.
Body length 2.10-2.70 mm, width $1.15-1.50 \mathrm{~mm}$, in holotype 2.23 and 1.30 mm , respectively.
Material. Hungary. Holotype: ${ }^{\lambda}$, "Bodrogszegiv. a.; Bodrog-part, 24.V.1995, leg. Hegyessy G.", "Coll. A. Podlussány" (MTMB). P a r a t y pes. 6 §, 1 \&, as holotype (MTMB, ZIN); 4 § , idem, but 30 VI 1995 (MTMB); 1 q, "Tarcal, Ördög-bánya, 3.V.1999, leg. Hegyessy G.", "Coll. A. Podlussány" (MTMB); 3 § ${ }^{\text {§ }}$, idem, but 30 V 1999 (MTMB); 1 ô, idem, but 15 V 1999; "Bodrogkeresztúr, Leduj, 13.VI.1994, leg. Hegyessy G.", "Coll. A. Podlussány" (MTMB); 1 §̃, idem, but 22 V 1994 (MTMB).

Etymology. The new species is dedicated to the collector, G. Hegyessy.


Figs 9-12. Brachysomus Schoenh., body $(9,12)$ and scaling of elytra (10, 11). 9, $10-$ B. albanicus Apfb.; 11, 12 - B. pelex sp. n.

## Subgenus Hippomias Yunakov, subgen. n.

Type species Brachysomus kubanensis Reitter, 1888 (Fig. 30).
Description. Rostral dorsum more strongly narrowing apically than in Brachysomus s. str., at antennal insertion 0.5 as wide as frons. Margins of antennal scrobe diverging to eye. Ventral margin of antennal scrobe distinct along entire length of scrobe, dorsal margin not reaching eye. Pterygia clearly visible in dorsal view, not covered by lateral margins of rostral dorsum. Base of elytra forming right angle with dorsal surface of mesonotum. Median lobe of aedeagus moderately sclerotized, dorsal surface membranous, apex flattened and not acute.

This is the largest subgenus of Brachysomus including almost all species of the first group by Formánek (1905) and the transsylvanicus group by Koštál (1992) except for Brachysomus zellichi Form., which has been transferred to the genus Amicromias Rtt. (Yunakov, 2005). Subgenus Hippomias subgen. n. is indistinctly separated morphologically from species of the subgenus Brachysomus s. str. owing to its broad morpho-ecological diversity. Species of this subgenus are combined into three species-groups based on external morphological characters of the head and body structure and distinctive structure of the genitalia. The species within the groups listed below are similar morphologically and chorologically.

Two Balkan groups, the ponticus and transsylvanicus groups, are the largest. Species of the ponticus group are characterized mainly by xeromorphic appearance. Among them, undoubtedly, most xeromorphically modified are B. ponticus Apfb. and B. commutatus Koštál. The rest species are less xeromorphic; they are distributed very locally in humid environment of the mountain forests and subalpine meadows. Their ranges are not extending beyond the Balkan Peninsula.

The transsylvanicus group includes mainly Carpathian species. They have the following characters typical of all forest species: pubescence fine, femora strongly club-shaped swollen in middle part, tibiae short and wide. This group includes several vicariant species: B. merkli sp. n. from the Carpathians, B. sulcatus sp . n. from the Crimea, and B. alexeevi sp. n. from the Northern Caucasus. The range of the transsylvanicus group is disjunct, unlike the entire range of the ponticus group.

Three forest species from the Western Caucasus are included in the kubanensis group. Two species of the rhinomioides group have an unusual structure of the head (rostral dorsum is noticeably widened apically) and scaling of the body: B. argutus sp. n. from Serbia and B. rhinomioides from Turkey and the Crimea.

## The ponticus group

Brachysomus (Hippomias) pelex Yunakov, sp. n. (Figs 11, 12, 69, 87, 108, 142, 169, 173)
Diagnosis. The new species is closely related to B. albanicus Apfb. (Figs 68, 108, 124, 143, 192, 201), but differs in the sinuate inner margin of meso- and metatibiae of male, dense vestiture composed of broad dentate scales, broader erect setae, depressed apical part of anal ventrite of male, and structure of the aedeagus, internal sac and spermatheca.

Description. Rostrum strongly conically narrowing to middle, weakly elongate (RL/RW $=1.03-1.07$ ). Pterygia clearly visible in dorsal view, noticeably projecting from lateral contour of rostrum. Rostral dorsum weakly convex longitudinally, separated from frons by clearly visible in lateral and dorsal views transverse depression. Eyes small, FW/ELD = 2.25-2.27 (2.26), weakly convex, situated very high on head capsule near level of frons. Frons flat, with punctures forming longitudinal striae under scales.

Antennae thick, scape noticeably curved, evenly widened apically. 1st and 2nd funicular segments elongate, 1st noticeably larger than 2 nd ; 3rd-6th segments as long as wide, 7th transverse; club ovate.

Pronotum transverse ( $\mathrm{PL} / \mathrm{PW}=0.78$ ), weakly constricted at apex, weakly evenly convex on disc, very densely finely and shallowly punctate; sides evenly convex.

Elytra oblong-oval (in male EL/EW = 1.26, in female 1.22), at base $1.02-1.10$ times as wide as base of pronotum. Disc slightly convex. Sides almost straight. Striae linear with punctures deep, narrowly separated. Interstriae noticeably convex, shining, twice as wide as striae.

Legs short and thick. Femora gently club-shaped swollen in middle part. Tibiae slender, straight, with weakly Sshaped inner margin. Protibia usually not widened at apex. Metatibia of male finely mucronate. 1st segment of tarsus triangular, 2nd segment weakly transverse. Claw-segment by 0.60 extending beyond lobes of 3 rd segment.

Male anal ventrite evenly strongly convex, with weak depression in apical part. Apical margin of anal ventrite inmale almost straight, in females semi-round.

Body and legs brown, densely covered with minute, lanceolate grey and brown scales. Elytra with transverse and oblique brown bands. Interstriae of elytra, scape of antennae and legs with shorter, evenly widened, rounded apically suberect setae. Length of setae on interstriae 0.4 times width of interstriae. Funicular segments and club with fine light pubescence. Ventrites with hairs and piliform scales.

Aedeagus, armature of internal sac and shape of spermatheca as in Figs 142, 169, 173.
Body length 2.25-2.30 mm, width $-1.20-1.30 \mathrm{~mm}$, in holotype -2.25 and 1.20 mm .
Material. Greece. Holotype: $\widehat{\sim}$, "Athos, Macedonien, A. Schatzmayr", "oertzeni ${ }^{\top}$, det. Solari", "oertzeni det. Formánek" (MCSNM). P a r aty pe. 2 \& (NMP, ZIN), as holotype.

Etymology. The name of this species is a feminine Latin noun meaning "a rival of the wife", it refers to the female resemblance of the males of another species, B. albanicus Apfelb.

## Brachysomus (Hippomias) boroveci Yunakov, sp. n. (Figs 13, 53, 90, 144, 185, 203)

Diagnosis. The new species is closely related to B. simulans sp. n. and B. oertzeni Fst. From B. simulans sp. n., it differs in the elongate suberect setae on interstriae of elytra and faint transverse depression in basal part of rostral dorsum. From B. oertzeni, the new species differs in the shape of head, interrupted median sulcus on rostral dorsum, and shape of spermatheca (Fig. 146).

Description. Rostrum conically narrowing to middle, slightly transverse or as long as wide ( $\mathrm{RL} / \mathrm{RW}=0.96-1.00$ ). Pterygia clearly visible in dorsal view, noticeably projecting from lateral contour of rostrum. Rostral dorsum parallel-sided, weakly convex longitudinally, separated from frons by slight transverse depression, with fine shallow median sulcus, distinctly more pronounced in female than in male. In male, median sulcus short and perceptible only in basal part of rostum. Eyes large (in male $\mathrm{FW} / \mathrm{ELD}=1.83$, in female 2.08 ), slightly convex, not projecting from lateral contour of head capsule, situated very high in head capsule almost at level of frons. Frons in male almost flat, in female wider and scarcely convex.

Antennal scape thin, slightly gently curved in basal $1 / 3$, evenly widened apically. Funicle noticeably widened apically. 1st and 2 nd funicular segments elongate, 1 st somewhat longer and wider than 2nd, its sides noticeably convex; 2nd segment straight-sided, slightly widened apically; 3rd-7th segments transverse; club ovate, clearly separated from funicle.

Pronotum transverse ( $\mathrm{PL} / \mathrm{PW}=0.78-0.80$ ), widest at middle, evenly convex at sides, slightly constricted at base and apex. Disc slightly flattened.

Elytra broad-oval (in holotype EL/EW = 1.24 , in paratype -1.23 ), weakly convex at sides and strongly convex on disc (especially in female), widest at middle. Base deeply emarginate, 1.10-1.14 times as wide as base of pronotum. Striae linear with punctures deep, narrowly separated. Crosspieces somewhat narrower than a puncture, situated at interstrial level. Interstriae convex, shining, twice as wide as striae.

Femora gently club-shaped swollen in middle part. Protibia slender, straight, usually not widened at apex. Metatibia of male with small mucro. 1st segment of tarsus triangular, 2nd segment weakly transverse. Claw-segment by 0.70 extending beyond lobes of 3rd segment.

1st ventrite weakly emarginate at apex. Male anal ventrite evenly slightly convex, without depression in apical part, with shining flattened plate and rosette of setae situated laterally at straight apical margin. Female anal ventrite slightly convex, with rounded apical margin.

Body brown or dark brown, densely covered with short, lanceolate, slightly excised apically grey scales. Disc of pronotum almost bare, sides densely covered with scales. Interstriae of elytra, pronotum, head, scape of antennae and legs with shorter evenly widened, rounded apically suberect setae. Length of setae $0.7-1.0$ width of interstriae.

Aedeagus, armature of internal sac and shape of spermatheca as in Figs 144, 168 and 203.


Fig. 13. Brachysomus boroveci sp. n.

Body length in holotype 1.90 mm , width 1.05 mm ; in paratype 2.20 and 1.25 mm , respectively.
Material. Greece. H olotype: ô, "Greece - Peloponnes, Lakónia - Golas, 24.III.1998, lgt. Fr. Št’áhlavský" (Bc). Paratypes. $1 \widehat{\delta}^{\lambda}, 1$, as holotype (ZIN).

Etymology. The new species is dedicated to my colleague Dr Roman Borovec (Nechanice, Czech Republic) in appreciation of his kind cooperation and contribution to the knowledge of Entiminae.

Brachysomus (Hippomias) assingi Yunakov, sp. n. (Figs 14, 54, 88, 127, 128, 147, 172, 174, 205)

Diagnosis. The new species is closely related to B. commutatus Košt’ál (Figs 42, 43, 56, 130, 148, $172,186,202,205$ ), but differs in the weakly convex eyes, straight-sided 1st and strongly elongate 2 nd funicular segments, weakly narrowed apically head capsule, deeply excised scales on the head and pronotum, brown-maculate elytra, structure of aedeagus and spermatheca.

Description. Rostrum weakly conically narrowing to middle, as long as, or slightly longer than wide (RL/RW $=$ 1.00-1.09). Pterygia clearly visible in dorsal view, noticeably projecting from lateral contour of rostrum. Rostral dorsum weakly convex longitudinally, separated from frons by slight transverse depression, with noticeable median sulcus. Eyes small, in males larger than in females (in males FW/ELD $=1.36-2.10$, in female $-2.50-2.75$ ), moderately convex, situated below frons level. Frons flat, with punctures forming longitudinal striae under scales.

Antennal scape thin, slightly gently curved in basal $1 / 3$, evenly widened apically. Funicle noticeably widened apically. 1st and 2nd funicular segments elongate, 3rd-7th segments transverse; club ovate.

Pronotum slightly transverse ( $\mathrm{PL} / \mathrm{PW}=0.77-0.83$ ), widest at middle, evenly convex at sides, slightly constricted at base and apex. Disc slightly convex, finely shallowly punctate.

Elytra broad-oval (EL/EW = 1.04-1.22), weakly evenly convex at sides and on disc in male and more strongly convex on disc and in basal $1 / 3$ of sides in females. Base deeply emarginate, $1.05-1.14$ times as wide as base of pronotum. Striae linear with punctures deep, narrowly separated. Crosspieces somewhat narrower than a puncture, situated at interstrial level. Interstriae moderately convex or flat, shining, twice as wide as striae.

Legs short. Femora gently club-shaped swollen in middle part. Tibiae straight, with slightly S-curved inner margin. Protibia usually not widened at apex. Metatibia of male weakly mucronate. 1st segment of tarsus triangular, 2nd segment weakly transverse. Claw-segment by $2 / 3$ extending beyond lobes of 3rd segment.

Ventrites covered with thin hairs and piliform scales. Anal ventrite of male without depression in apical part; apical margin straight in males, rounded in females.

Body dark brown, elytra brownish-maculate, very densely covered with greyish brown recumbent round scales slightly dentate apically. Pronotum and head densely covered with deeply excised apically scales. Erect setae uniformly spread over entire surface of elytra, with length $2 / 3$ width of interstriae; erect setae on pronotum inconspicuous. Outer margin of femora and protibia densely covered with round scales, inner margin of tibiae with thin light hairs.

Aedeagus, armature of internal sac and shape of spermatheca as in Figs 147, 172, 174 and 205.

Body length $1.80-2.05 \mathrm{~mm}$, width $1.10-$ 1.25 mm ; in holotype 2.00 and 1.20 mm , respectively.

Material. Turkey. Holotype: $\delta^{\lambda}$, "Turkey, Antakya, Nur Dagl., WSW Yesilkent, 990 $\mathrm{m}, 36^{\circ} 54^{\prime} 58^{\prime} \mathrm{N}, 36^{\circ} 18^{\prime} 54^{\prime}$ ' E , mixed deciduous forest, № 14, 28 XII 2000, V. Assing" (DEI). Paratypes. $3 \widehat{\delta}, 3$, as holotype (DEI, ZIN).

Etymology. The new species is dedicated to the collector, Dr Volker Assing.

Brachysomus (Hippomias) simulans Yunakov, sp. n. (Figs 15, 58, 89, 129, 135, 145, 180)
Diagnosis. B. simulans sp. n. is very similar to species of the kubanensis-group owing to the presence of a pattern on the elytra, but is closely related to $B$. commutatus and B. ponticus (Figs 40-43, 56, 130, 134, $148,156,186,188)$, differing in the less conspicuous and finer scales, strongly convex rostral dorsum with more noticeable transverse depression in its basal part, and structure of genitalia of both sexes.

Description. Rostrum weakly conically narrowing to middle, slightly longer than wide (RL/RW $=1.05-1.11$ ). Pterygia clearly visible in dorsal view, noticeably projecting from lateral contour of rostrum. Rostral dorsum weakly convex longitudinally, separated from frons by slight transverse depression, with noticeable median sulcus. Eyes small (FW/ELD = $2.00-2.25$ ), moderately convex, situated slightly below frons level. Frons flat, with punctures forming longitudinal striae under scales.

Antennal scape evenly curved and widened apically. Funicle noticeably widened apically. 1st and 2nd funicular segments elongate, 1st larger than 2nd;


Fig. 15. Brachysomus simulans sp. n. 3rd-7th segments transverse; club ovate.

Elytra oval ( $\mathrm{EL} / \mathrm{EW}=1.25-1.28$ ), widest at middle, weakly evenly convex at sides and on disc. Base slightly emarginate, 1.02-1.11 times as wide as base of pronotum. Striae linear with punctures deep, narrowly separated. Crosspieces somewhat shorter than a puncture, situated below interstrial level. Interstriae convex, shining, twice as wide as striae.

Femora gently club-shaped swollen in middle part. Protibia straight, with slightly S-curved inner margin. Metatibia of male weakly mucronate. 1st segment of tarsus triangular, 2 nd segment weakly transverse. Claw-segment by $2 / 3$ extending beyond lobes of 3rd segment.


Fig. 16. Brachysomus armatus sp. n

Anal ventrite of males without depression; apical margin slightly emarginate, with groups of long hairs.

Body mid- to dark brown, elytra with dark brown maculae, very densely covered with brown shortlanceolate scales and short, lobe-shaped suberect setae with length 0.5 width of interstriae. Head and pronotum without distinct suberect setae.

Aedeagus and spermatheca as in Figs 145 and 180.
Body length $1.75-2.40 \mathrm{~mm}$, width $0.95-$ 1.35 mm , in holotype 1.75 and 0.95 mm , respectively.

Material. Greece. Holotype: $\widehat{\delta}$, "Greece, Peloponnes, Lakonia, 40 km SO Tripoli, Strasse zw. Agios Petros u. Karies, 1100 m, W-Hang, alte Eichen, Erica arborea, Moos, $37^{\circ} 18^{\prime} 49^{\prime \prime} \mathrm{N}$, $22^{\circ} 30^{\prime} 37^{\prime \prime}$ O, 22 III 1979, L. Zerche" (DEI). P a ratypes. $1 \circlearrowleft(\mathrm{ZIN}), 1 \not \subset(\mathrm{DEI})$, as holotype.

Etymology. The name of this species refers to its resemblance of $B$. kubanensis Rtt.

Brachysomus (Hippomias) armatus Yunakov, sp. n. (Figs 16, 55, 110, 131, 170, 171)

Diagnosis. The new species is closely related to B. commutatus and B. ponticus (Figs 55, $56,110,131,134,170,186,188)$, but differs in
the parallel-sided head capsule, strongly S-curved and blade-shaped sharpened inner margin of metatibia, shape of elytra, form of scales and structure of aedeagus.

Description. Rostrum weakly conically narrowing to middle, slightly transverse ( $\mathrm{RL} / \mathrm{RW}=0.91$ ). Head capsule almost parallel-sided. Pterygia clearly visible in dorsal view, noticeably projecting from lateral contour of rostrum. Rostral dorsum almost flat, not separated from frons by transverse depression, almost parallel-sided, without median sulcus. Eyes small ( $\mathrm{FW} / \mathrm{ELD}=2.0$ ), oval, moderately convex, situated below frons level. Frons flat, with punctures forming longitudinal striae under scales.

Antennal scape slightly evenly curved and widened apically. Funicle noticeably widened apically. 1st and 2nd funicular segments elongate, 1st larger than 2nd; 3rd-7th segments transverse; club ovate.

Pronotum moderately transverse ( $\mathrm{PL} / \mathrm{PW}=0.74$ ), widest at middle, evenly convex on disc and at sides, hardly constricted at base and at apex, finely shallowly punctate under scales.

Elytra oval ( $\mathrm{EL} / \mathrm{EW}=1.27$ ), widest behind middle, weakly evenly convex at sides and on disc. Striae linear with narrowly separated shallow punctures. Crosspieces somewhat shorter than a puncture, situated at interstrial level. Interstriae flat, shining, 3 times as wide as striae. Base slightly sinuate

Femora gently club-shaped swollen in middle part. Protibia straight, with slightly S-curved inner margin. Metatibia with strongly S-curved and blade-shaped sharpened inner face, weakly mucronate. 1st segment of tarsus triangular, 2nd segment weakly transverse. Claw-segment by $2 / 3$ extending beyond lobes of 3 rd segment.

Anal ventrite of male weakly depressed in apical part, with hardly emarginate apical margin.
Body dark brown, densely covered with recumbent grey scales dentate apically and short, lobe-shaped suberect setae with length 0.5 width of interstriae. Underside covered with piliform scales and hairs.

Aedeagus as in Figs 170 and 171.
Body length 1.8 mm , width 1.0 mm .
Material. Turkey. Holotype: $\widehat{0}$, "Turkey centr., Kastamonu S Agazdagi Gec., 1800-2000 m, 7 VII 1996 (Bayer leg.)" (Bc).

Etymology. The name of this species refers to the sharp inner face of the tibiae in the beetles.
Brachysomus (Hippomias) curvimanus Yunakov, sp. n. (Figs 17, 60, 61, 99, 149, 187)


Fig. 17. Brachysomus curvimanus sp. n.

Diagnosis. The new species is closely related to $B$. commutatus and B. ponticus (Figs 40, 42, 148, $186,188)$, but differs in the elongate body, oblong-oval elytra, strongly incurved protibia, form of antennal scrobes and structure of aedeagus and spermatheca.

Description. Rostrum noticeably conically narrowing to middle, slightly longer than wide ( $\mathrm{RL} / \mathrm{RW}=1.03-1.14$ ). Pterygia clearly visible in dorsal view, noticeably projecting from lateral contour of rostrum. Dorsal margin of antennal scrobe directed to hind margin of eye. Rostral dorsum at base narrowed, then parallel-sided, with deep median sulcus, not or obsoletely separated from frons by transverse depression. Eyes small ( $\mathrm{FW} / \mathrm{ELD}=1.91-2.50$ ), strongly convex, situated below frons level. Frons flat, with punctures forming longitudinal striae under scales.

Antennal scape thin, slightly evenly curved, sharply widened in apical $1 / 3$. Funicle noticeably widened apically. 1st $(\mathrm{L} / \mathrm{W}=2)$ and $2 \mathrm{nd}(\mathrm{L} / \mathrm{W}=1.8)$ funicular segments elongate, 1 st wider than 2 nd ; 3rd-6th segments as long as wide, 7 th segment slightly transverse; club ovate.

Pronotum slightly transverse ( $\mathrm{PL} / \mathrm{PW}=0.81-0.88$ ), widest at middle, evenly convex on disc and at sides, scarcely constricted at base and with more noticeable wide constriction at apex, finely, shallowly punctate. Disc with shallow lateral depressions.

Elytra oblong-oval or oval ( $\mathrm{EL} / \mathrm{EW}=1.31-1.40$ ), weakly convex at sides in males and strongly convex in females, widest at middle. Disc slightly convex longitudinally. Base deeply emarginate. Striae linear with deep, narrowly separated punctures. Crosspieces somewhat shorter than a puncture, situated below interstrial level. Interstriae convex, shining, twice as wide as striae.

Femora gently club-shaped swollen in middle part. Protibia strongly incurved; male tibiae noticeably mucronate, metatibia with large mucro. 1st segment of tarsus triangular, 2nd segment in males strongly, in females weakly transverse. Claw-segment by $2 / 3$ extending beyond lobes of 3rd segment

Anal ventrite of males weakly depressed in apical part, widely rounded apically.
Body dark brown, densely covered with recumbent grey scales dentate apically, and short, lobe-shaped suberect setae with length 0.5 width of interstriae. Underside covered with piliform scales and hairs

Aedeagus and spermatheca as in Figs 149 and 187.
Body length in males $2.50-2.55 \mathrm{~mm}$, in females $-2.30-2.85 \mathrm{~mm}$, width in males $1.20-1.25 \mathrm{~mm}$, in females $-1.25-$ 1.50 mm ; in holotype 2.50 and 1.25 mm , respectively.

Material. Turkey. Holotype: ふ, "Turkey, vil. Izmir, Boz dağlari, Boz dağ köy env., 1200 m , sifting of plant
 (I. Smetana) (Bc).

Etymology. The name of this species refers to the strongly incurved male protibia.
Brachysomus (Hippomias) fallax Yunakov, sp. n. (Figs 18, 59, 73, 91, 125, 150, 167)
Diagnosis. The new species is closely related to B. albanicus Apfb. and B. mikati Koštál (Figs 9, $10,62,63,109,124,143,151,192,201$ ), but differs in the presence of median sulcus on rostral dorsum, small mucro on male metatibia, subrecumbent setae on interstriae of elytra and structure of genitalia in both sexes. From B. mikati, it differs also in the very highly (almost at frons level) situated eyes.

Description. Rostrum noticeably conically narrowing to middle, then parallel-sided, slightly longer than, or as long as wide $(\mathrm{RL} / \mathrm{RW}=1.00-1.07)$. Pterygia clearly visible in dorsal view, noticeably projecting from lateral contour of rostrum. Rostral dorsum weakly convex longitudinally, separated from frons by weak transverse depression, with thin median sulcus. Eyes small ( $\mathrm{FW} / \mathrm{ELD}=2.20-2.60$ ), slightly convex, situated close to frons level. Frons flat, with punctures forming longitudinal striae under scales.

Antennae thick. Antennal scape noticeably curved, evenly widened apically. 1st and 2nd funicular segments elongate, 1st larger than 2nd; 3rd-6th segments as long as wide, 7th segment transverse; club ovate.

Pronotum slightly transverse (PL/PW = $0.79-0.93$ ), widest at middle, evenly slightly convex on disc and at sides, weakly constricted at apex and more noticeably constricted at base, finely shallowly punctate under scales.

Elytra oval or broad-oval, sometimes nearly round (EL/EW = 1.16-1.30), evenly convex at sides and on disc. Striae linear with deep, narrowly separated punctures. Crosspieces somewhat shorter than a puncture, situated below interstrial level. Interstriae convex, shining, twice as wide as striae. Base 1.021.15 times as wide as base of pronotum.

Legs short. Femora gently club-shaped swollen in middle part. Protibia straight, with slightly Scurved inner margin. Male metatibia weakly mucronate. 1st segment of tarsus triangular, 2nd segment weakly transverse. Claw-segment by $2 / 3$ extending beyond lobes of 3rd segment.

Ventrites covered with hairs and piliform scales. Anal ventrite of male evenly strongly convex, not depressed in apical part, with straight apical margin; in female, anal ventrite with semicircular apical margin.


Fig. 18. Brachysomus fallax sp. n.

Integument mid- to dark brown. Body and outer surface of legs covered with lanceolate greyish brown scales. Suberect setae uniformly covering entire surface of elytra and inconspicuous on pronotum, their length 0.5 width of interstriae. Antennae covered with erect setae and hairs.

Aedeagus and spermatheca as in Figs 150 and 167.
Body length $1.70-2.45 \mathrm{~mm}$, width $0.95-1.40 \mathrm{~mm}$; in holotype 1.90 and 1.10 mm , respectively.
Material. Greece. Holotype: 才, "Greece, Kazani, Pieria Mts., SE Velventos, N-Lage, 1570 m, 16 IV 2000 / Fagus-Wald, gesiebt, $40^{\circ} 11^{\prime} 16^{\prime \prime} \mathrm{N}, 22^{\circ} 05^{\prime} 46^{\prime \prime} \mathrm{E}$ (L. Behne)" (DEI). P a raty pes. $9 \delta^{\top}, 9$, as holotype (DEI, ZIN); 13 §̂, 2 \& , "Greece, Macedonia, Pieria, Oros Pieria, O-Seite, Ski-Center oberhalb Elatochori, Streu am Schneerand, 4 IV 2001, $1485 \mathrm{~m}, 40^{\circ} 18^{\prime} 26^{\prime \prime} \mathrm{N}, 22^{\circ} 12^{\prime} 04^{\prime \prime} \mathrm{E}$ (L. Behne)" (DEI).

Etymology. The name of this species, a masculine Latin adjective, refers to its close resemblance of B. albanicus Apfelb.

## The transsylvanicus group

## Brachysomus (Hippomias) argutus Yunakov, sp. n. (Figs 19, 65, 66, 70, 93, 181, 182)

Diagnosis. In the structure of head B. argutus sp. n. is similar to B. rhinomioides Košt’ál (Fig. 20), but it is closely related and more similar in other characters to B. carpathicus Koštál (Figs 33, 34). From B. rhinomioides (Figs 64, 67, 71, 152, 179, 183, 184), it differs in the gently convex rostral dorsum with slight transverse depression at its base, thin pubescence on interstriae of the elytra, shorter suberect setae, shape of pronotum, weakly convex disc of the elytra, distinctly pubescent interior margin of the metatibia, weakly convex and depressed in apical part anal ventrite, and structure of aedeagus. From B. carpathicus, the new species differs in the elongate rostrum with depressed base of dorsum, distinctly pubescent inner margin of the metatibia and structure of aedeagus.


Figs 19, 20. Brachysomus argutus sp. n. and B. rhinomioides Košťál.

Description. Male. Rostrum noticeably conically narrowing to middle, almost as long as wide (RL/RW $=1.05$ ). Pterygia clearly visible in dorsal view, strongly projecting from lateral contour of rostrum. Rostral dorsum parallel-sided, weakly convex longitudinally, separated from frons by transverse depression, with fine median sulcus. Eyes small $(F W / E L D=2.0)$, oval, strongly convex, situated below frons level. Frons hardly convex.

Antennae thin and long. Scape weakly curved, evenly widened apically. 1st and 2 nd funicular segments elongate, 1 st thicker than 2nd; 3rd segment as long as wide; 4-7th segments transverse; club broad spindle-shaped, weakly separated from funicle.

Pronotum almost as long as wide, widest at middle, weakly convex at sides and on disc, weakly constricted at apex and at base. Sculpture under scales reticulate, with fine shallow punctures on disc gradually turning into micro-granules on sides.

Elytra subcordate $(E L / E W=1.25)$, strongly irregularly convex at sides, widest before middle. Disc moderately convex longitudinally and in cross-section. Striae linear with deep, narrowly separated punctures. Crosspieces somewhat shorter than a puncture, situated below interstrial level. Interstriae flat, shining, twice as wide as striae. Base strongly sinuate, 1.08 times as wide as base of pronotum.


Figs 21, 22. Brachysomus Schoenh., body. 21 - B. alexeevi sp. n., 22 - B. sulcatus Yun.

Femora gently club-shaped swollen in middle part. Tibiae thin, strongly elongate. Protibia with straight outer margin and weakly projecting outer apical angle; inner margin S-curved. Metatibia with nearly straight inner margin, with small mucro and rosette of long light hairs. 1st segment of tarsus triangular, 2nd segment strongly transverse. Claw-segment by $2 / 3$ extending beyond lobes of 3 rd segment.

Anal ventrite weakly convex, with slight depression in apical part and slightly emarginate apical margin.
Integument brown. Body with silky pubescence, sparsely covered with piliform scales and suberect setae evenly widened apically. Setae uniformly covering surface of elytra, their length 0.5 width of interstriae. Ventrites covered with hairs and piliform scales.

Aedeagus as in Figs 181 and 182.
Body length 1.60 mm , width 0.90 mm .
Material. Serbia and Montenegro. Holotype: $\widehat{ }$, "SE Serbia, Zvonce env., nr Pirot, 27.IV.2002, T. Lackner" (Bc).

Etymology. The name of this species, a masculine Latin adjective, refers to its expressive appearance.

Brachysomus (Hippomias) alexeevi Yunakov, sp. n. (Figs 21, 86, 123, 153, 197)
Diagnosis. The new species is closely related to B. sulcatus Yunakov, 1999 (Figs 22, 85, 120, 154, 198) and differs in the shorter erect setae (length $2 / 3$ interstriae width; in B. sulcatus setae length nearly equal to interstriae width), shape and size of scales on the elytra (in B. sulcatus scales longer, uniform, piliform), evenly curved antennal scape and structure of aedeagus.

Description. Rostrum parallel-sided, as long as wide. Pterygia clearly visible in dorsal view, scarcely projecting from lateral contour of rostrum. Rostral dorsum moderately widened apically, weakly convex longitudinally, flattened behind epistome, separated from frons by weak transverse depression, with broad, shallow median sulcus; width near antennal insertion 0.7 that of frons. Eyes small ( $F W / E L D=2.20-2.25$ ), round, strongly convex, situated almost at frons level. Frons weakly convex.

Antennal scape weakly evenly curved and widened apically, at apex 1.6 times as wide as at base. 1 st and 2 nd funicular segments elongate, 1st $(\mathrm{L} / \mathrm{W}=1.25)$ thicker than 2 nd ; 3rd-7th segments transverse; club broad spindle-shaped, weakly separated from funicle.

Pronotum slightly transverse ( $\mathrm{PL} / \mathrm{PW}=0.77-0.80$ ), evenly convex at sides, widest at middle. Disc evenly convex longitudinally, distinctly finely granulate.

Elytra broad-oval ( $\mathrm{EL} / \mathrm{EW}=1.17-1.23$ ), in female wider, evenly convex on disc and at sides. Striae linear with deep, narrowly separated punctures. Crosspieces somewhat shorter than a puncture, situated below interstrial level. Interstriae flat, shining, 1.3 times as wide as striae.

Femora gently club-shaped swollen in middle part. Tibiae thin, strongly elongate. Protibia with straight outer margin and weakly projecting outer apical angle. 1st segment of tarsus triangular, 2nd segment strongly transverse. Clawsegment by $2 / 3$ extending beyond lobes of 3 rd segment.

Anal ventrite of male without depression in apical part, broadly rounded apically.
Integument of body brown, antennae and legs yellowish brown. Body rather sparsely and evenly covered with light fine, small, piliform and lanceolate scales and short, erect, slightly widened and blunted apically setae, length of latter $2 / 3$ width of interstriae.

Aedeagus weakly sclerotized, median lobe parallel-sided, strongly narrowed and acute apically (Fig. 153).
Spermatheca as in Fig. 197.
Body length 1.7-1.95 mm, width $1.0-1.15 \mathrm{~mm}$, in holotype 1.95 and 1.15 mm , respectively.
Material. Russia, North Ossetia. Holotype: $\uparrow$, Central Caucasus, North Ossetia, Kabardino-Sunzhenskii Mt. R., Zmeiskiye Mts., 6 km NW of Dur-Dur River mouth, N slope, 540 m , Fagus forest, Rubus + Arum association, 18 VIII 1986 (S.K. Alexeev) (ZIN). Paraty pe. ふ, Central Caucasus, North Ossetia, Kabardino-Sunzhenskii Mt. R., Zmeiskiye Mts., 3.5 km NW of Kadzhin Vill., ESE slope, 500 m , steppefied meadow with Amygdalus nana L. (S.K. Alexeev) (ZIN).

Etymology. The new species is named for the collector, S.K. Alexeev.

## Brachysomus (Hippomias) merkli Yunakov, sp. n. (Figs 23, 82, 112, 114, 118, 155)

Diagnosis. The new species is closely related to B. polonicus Wanat \& Mazur, 2005 and B. tenuicollis sp. n. (Figs 31, 32, 83, 84, 113, 115, 116, 119, 121, 156, 157, 195, 196), but clearly differs in the structure of genitalia of both sexes and kind of pubescence of the body: setae on the elytral interstriae narrower, longer, acute apically, with length equal to width of interstriae; body evenly, finely covered with piliform and narrow-lanceolate grey scales. Antennae slender, 4-7th funicular segments as long as wide
(noticeably transverse in B. polonicus and B. tenuicollis sp. n.). Tarsi slender and long. 1st ventrite with deeply emarginate apical margin (entire in B. polonicus).

Description. Rostrum noticeably narrowing to antennal insertion, as long as wide. Pterygia clearly visible in dorsal view, weakly projecting from lateral contour of rostrum. Rostral dorsum flat, widened to middle, then parallel-sided to antennal insertion, not separated from frons by transverse depression, without median sulcus. Epistomal plate widened. Eyes small (FW/ELD $=2.50$ ), strongly convex, situated below level of weakly convex frons.

Antennal scape weakly evenly curved and widened apically, at apex twice as wide as at base. 1st and 2nd funicular segments elongate, 1 st $(\mathrm{L} / \mathrm{W}=1.5)$ thicker than $2 \mathrm{nd}(\mathrm{L} / \mathrm{W}=1.3)$; $3 \mathrm{rd}-7$ th as long as wide; club broad spindle-shaped, weakly separated from funicle.

Pronotum transverse (PL/PW = $0.70-0.78$ ), evenly convex at sides, widest at middle. Disc evenly weakly convex longitudinally, finely distinctly punctate, at sides granulate.

Elytra oval (EL/EW $=$ ), in female broad-oval, evenly convex on disc and at sides. Striae linear with shallow, narrowly separated punctures. Crosspieces somewhat shorter than a puncture, situated below interstrial level. Interstriae slightly convex, shining, twice as wide as striae.


Fig. 23. Brachysomus merkli sp. n.


Fig. 24. Brachysomus tenuicollis sp. n.

Femora gently club-shaped swollen in middle part. Tibiae slender, strongly elongate. Protibia with straight outer margin and weakly projecting apical outer angle. 1st segment of tarsus triangular, 2nd strongly transverse. Clawsegment by 0.75 extending beyond lobes of 3 rd segment.

Anal ventrite rounded at apex.
Integument of body brown, antennae and legs yellowish brown. Body sparsely and evenly covered with light small narrow-lanceolate scales and long, erect, narrow, acute apically setae with length equal to width of interstriae.

Spermatheca as in Fig. 155.
Body length $2.05-2.20 \mathrm{~mm}$, width $1.15-$ 1.25 mm , in holotype 2.20 and 1.25 mm , respectively.

Material. Romania (?). Holotype: $\quad$, "Hung[aria] mer[idionalis], E. Merkl" (handwritten) (MTMB). Paratypes. 2 , as holotype (MTMB, ZIN). The types probably originate from Transsylvania, now a part of Romania.

Etymology. The new species is dedicated to Dr Otto Merkl (MTMB, Budapest), in appreciation of his kind cooperation.

Brachysomus (Hippomias) tenuicollis Yunakov, sp. n. (Figs 24, 84, 113, 116, 119, 157)
Diagnosis. The new species is closely related to B. merkli sp. n. and B. polonicus Wanat \& Mazur, 2005. From B. merkli sp. n., it differs in the shorter erect drop-shaped setae (length $1 / 3-1 / 2$ width of interstriae); densely covered with lanceolate scales body, and thicker antennae with transverse 4-7th funicular segments (in B. merkli sp. n., 4-7th segments as long as wide). Tarsi broader and shorter, claw-segment by 0.81 extending beyond lobes of 3rd segment. Apical margin of 1st ventrite almost straight, slightly sinuate medially (strongly sinuate in B. merkli sp. n.). From B. polonicus the new species differs in the less transverse and evenly convex at sides pronotum ( $\mathrm{PL} / \mathrm{PW}=0.81$; in females of $B$. polonicus $\mathrm{PL} / \mathrm{PW}=$ $0.70-0.72$ ), and widest at middle, clearly wider at base than pronotum, base of elytra (in B. polonicus elytra widest in basal $1 / 3$, at base as wide as pronotum).

Description. Rostrum conical, slightly elongate ( $\mathrm{RL} / \mathrm{RW}=1.08$ ). Pterygia clearly visible in dorsal view, strongly projecting from lateral contour of rostrum. Rostral dorsum flat, in basal $1 / 3$ narrowing, then parallel-sided, from antennal insertion weakly widened apically, not separated from frons by transverse depression. Frons flat, broad. Epistomal plate impressed. Eyes small (FW/ELD = 2.7), oval, strongly hemispherically convex.

Antennal scape weakly evenly curved and widened apically, at apex thrice as wide as at base. Funicle widened apically. 1st and 2 nd funicular segments elongate, 1st $(\mathrm{L} / \mathrm{W}=1.4)$ thicker than $2 \mathrm{nd}(\mathrm{L} / \mathrm{W}=1.3)$; 3rd segment square, $4-7$ th transverse; club ovate, not sharply separated from funicle.

Pronotum transverse ( $\mathrm{PL} / \mathrm{PW}=0.81$ ), evenly convex at sides, widest at middle. Disc flat longitudinally, weakly convex in cross-section, finely distinctly punctate, at sides granulate, without lateral depression; apex slightly constricted.

Elytra oval (EL/EW $=1.29$ ), weakly evenly convex at sides. Disc gently convex longitudinally and in cross-section. Base noticeably emarginate, distinctly wider than base of pronotum. Striae linear. Interstriae flat, broad, 2.5 times as wide as striae. Punctures small, shallow, weakly separated. Crosspieces somewhat shorter than a puncture, situated below interstrial level.

Protibia with straight outer margin and weakly projecting outer apical angle. 1st segment of tarsus triangular, 2nd segment strongly transverse; claw-segment by 0.81 extending beyond lobes of 3rd segment.

Apical margin of 1 st ventrite almost straight, slightly emarginate in middle. Anal ventrite flat, rounded apically.
Body dark brown, antennae and legs brown. Head, pronotum and elytra evenly covered with small, light narrowlanceolate scales and drop-shaped suberect setae. Legs and antennae with thin acute setae and hairs, length of setae $1 / 3-1 / 2$ width of interstriae.

Spermatheca as in Fig. 157.
Body length 2.30 mm , width 1.35 mm .
Material. Hungary. Holotype: 우 (MTMB), "Telkibánya, Cser-hegy; 1989.V.24. leg. Hegyessy G.; coll. A. Podlussány".

Etymology. The name of this species, the Latin adjective, refers to the relatively narrow pronotum in the beetles.

## The kubanensis group

Brachysomus (Hippomias) ellipticus Yunakov, sp. n. (Figs 25, 27, 100, 160, 193, 199)
Diagnosis. The new species is closely related to B. kubanensis Rtt. (Figs 26, 30, 102, 189, 191, 194, 200), from which differs in the elongate body ( $\mathrm{EL} / \mathrm{EW}=1.36-1.38$; in $B$. kubanensis 1.21-1.24), sinuate and blunted inner face of metatibia in male, smaller eyes (FW/ELD $=2.40-2.81$; in $B$. kubanensis $1.66-2.07$ ) and structure of aedeagus.

Description. Rostrum conical, weakly elongate ( $\mathrm{RL} / \mathrm{RW}=1.12-1.21$ ). Pterygia clearly visible in dorsal view, strongly projecting from lateral contour of rostrum. Rostral dorsum parallel-sided, at antennal insertion 0.6 times as wide as frons, weakly convex longitudinally, with weak median sulcus, separated from frons by shallow transverse depression. Epistomal plate deeply impressed, epistome rounded-triangular. Eyes small ( $\mathrm{FW} / \mathrm{ELD}=2.40-2.81$ ), oblong-oval, weakly convex, situated 0.87 ETD below frons level. Frons flat,, with punctures forming longitudinal striae under scales.

Antennae thick; scape evenly curved and widened apically, at apex 3.5-4 times as wide as at base, extending beyond apical margin of pronotum. Funicle noticeably widened apically. 1st $(\mathrm{L} / \mathrm{W}=2.25)$ and $2 \mathrm{nd}(\mathrm{L} / \mathrm{W}=2.00)$ funicular segments elongate, 1 st wider than, and 1.5 times as long as 2 nd , 3 rd as long as wide, $4-7$ th segments transverse; club ovate.

Pronotum weakly transverse ( $\mathrm{PL} / \mathrm{PW}=0.75-0.83$ ), widest at middle, evenly convex on disc and at sides, noticeably constricted at base and at apex, with apical constriction noticeably wider than basal one, finely distinctly granulate and shallowly punctate. Disc with shallow lateral depressions, occasionally with shallow median sulcus.

Elytra oblong-oval in male, broader oval ( $\mathrm{EL} / \mathrm{EW}=1.36-1.38$ ) in female, evenly convex on disc and at sides. Base of elytra slightly emarginate. Striae broad with shallow, noticeably separated punctures. Crosspieces somewhat shorter than a puncture, situated below interstrial level. Interstriae convex, shining, as wide as striae.

Femora gently club-shaped swollen in middle part. Protibia with straight outer margin, S-curved interiorly. Metatibia of male weakly sinuate interiorly, without interior blade-shaped edging, distinctly mucronate; in female, metatibia slightly narrowing apically. 1 st segment of tarsus triangular, 2 nd segment as long as wide. Claw-segment by 0.58 extending beyond lobes of 3rd segment.

Body light brown to dark brown, antennae and legs usually light brown. Head, pronotum and elytra densely covered with grey and brown lanceolate scales. Epistomal plate without scales. Elytra with vague spotted pattern from brown scales and short suberect lanceolate setae on interstriae. Antennal scape and outer surface of femora and tibiae densely covered with scales and erect setae, funicle of antennae and inner margin of tibiae with long light hairs. Length of setae on elytra $1 / 2$ width of interstriae; head and pronotum with few erect setae. Abdomen sparsely covered with hair-like setae and hairs.

Anal ventrite of male slightly impressed in apical part, evenly punctate, slightly emarginate apically. Anal ventrite of female without depression, with straight apical margin.

Aedeagus weakly sclerotized; median lobe as long as apophyses, ventral side of median lobe, except distal part, membranous. Ligulae slightly sclerotized. Internal sac micro-granulate with small lobe-shaped sclerite. Micro-granules round, lobe- and spine-shaped (Figs 193, 199). Spermatheca as in Fig. 160.

Body length 2-2.9 mm, width $1.05-1.65 \mathrm{~mm}$; in holotype 2.25 and 1.25 mm , respectively.


Figs 25-28. Brachysomus Schoenh., body (25) and ventrites (26-28). 25, 27 - B. ellipticus sp. n.; 26 - B. kubanensis Rtt.; 28 - B. kovali sp. n.

Material. Russia, Western Caucasus. Holotype: §, Krasnodar Terr., Aibga Mt. Range, 1300-1700 m, 11 VI 1997 (G.E. Davidian) (ZIN). P ar aty pes. 25 §, 19 q, as holotype (ZIN); $1 \delta^{\lambda}, 2$, some data as holotype, but 600-1300 м, 10 VI 1997 (ZIN); 1 §, idem, but 12 VI 1997 (ZIN); 1 ㅇ, idem, but 7 VIII 1991 (ZIN); 4 §, idem, 1000 m , broad-leaved forest with Fagus orientalis, 10 VI 2001 (R.V. Filimonov) (ZIN, Fc); 1 \&, idem, 1400 m, 14 VI-23 VIII 1987 (I.A. Belousov) (ZIN); 1 §, 3 ¢, idem, 500 m, 29 IV-11 IX 1992 (A.G. Koval') (ZIN); 1 §, idem, 1700 m, 1 VI 1995 (A.I. Roubchenya) (ZIN); $1 \delta^{\lambda}, 3$, idem, 16 V-5 X 1988 (H. Hippa, P. Vilkamaa) (ZIN, ZMUH); $1 \delta^{\lambda}$, Fisht Massif, near Pshekho-Su Mt., 26 VI 1997 (G.E. Davidian) (ZIN); 4 ठ, 4 ㅇ, Atshishkho Range: 1600-2000 m, subalpine zone, 4 VIII 1991 (G.E. Davidian) (ZIN); 5 §, 1 ค, idem, 2500 m, 24 VII 2001 (G.E. Davidian) (ZIN); 1 §’, 2 ค, idem, 10 VI 1997 (A.G. Koval') (ZIN); 4 §, 5 ㅇ, near Krasnaya Polyana Vill., Mzymta Riv. canyon, 18 VII-15 VIII 1986 (A.G. Koval')


Figs 29, 30. Brachysomus Schoenh., body. 29 - B. kovali sp. n., 30 - B. kubanensis Rtt.
(ZIN); 3 §, 1 Q, S spurs of Chugosh Range, Achipse Riv. left bank, 1300 m, 21 VII-10 VIII 1994 (A.Yu. Solodovnikov) (Sc); 1 q, NW slope of Iegosh Mt., 23 V 1996 (G.E. Davidian) (ZIN); 9 §, 8 q, Fanagoreiskaya Vill., 2 km NW of Schetka Mt., Fagus forest, 6-8 VI 1997 (G.E. Davidian) (ZIN); 7 §, 1 ㅇ, "Cauc. occ., Krasna Polana, VIII, Dr. Lgocki", "Br. kubanensis" (ZIN, SMTD); 2 q, "Krasna Poljana" (NMP).

Etymology. The name of this species, a Latin adjective, refers to the relatively narrow elliptical elytra in the beetles.

## Brachysomus (Hippomias) kovali Yunakov, sp. n. (Figs 28, 29, 101, 158, 190)

Diagnosis. The new species is very closely related to B. kubanensis Rtt., but differs in the sinuate, unsharpened interiorly metatibia of male, flattened and slightly emarginate at apex anal ventrite of male, more convex eyes, short rostrum (RL/RW = 1.09-1.20; in B. kubanensis 1.18-1.34), subrecumbent setae on the elytra (in B. kubanensis elytra usually with suberect or recumbent setae) and structure of aedeagus.

Description. Rostrum conical, as long as wide or slightly elongate (in male RL/RW $=1.09$, in female $\mathrm{RL} / \mathrm{RW}=$ 1.11-1.20). Pterygia clearly visible in dorsal view, strongly projecting from lateral contour of rostrum. Rostral dorsum paral-lel-sided, weakly convex longitudinally, occasionally with weak median sulcus, not separated from frons by transverse depression. Epistomal plate deeply impressed, epistome with rounded-triangular edge. Eyes small (FW/ELD = 1.91-2.54), oblong-oval, noticeably convex, situated 0.62 ETD below frons level. Frons flat, with punctures forming longitudinal striae under scales.


Figs 31-34. Brachysomus Schoenh., body (31, 33) and scaling of elytra (32, 34). 31, 32 B. polonicus Wanat \& Mazur; 33, $34-$ B. carpathicus Košt'ál.

Pronotum transverse in female, weakly transverse ( $\mathrm{PL} / \mathrm{PW}=0.69-0.92$ ) in male, evenly convex at sides, widest at middle, noticeably constricted at apex and at base. Disc evenly slightly convex in cross-section, with noticeable lateral depressions.

Elytra of males oval, those of female broad-oval (EL/EW = 1.17-1.32), evenly convex on disc and at sides. Disc strongly convexin females. Base of elytra slightly emarginate. Striae fine, with shallow, noticeably separated punctures. Crosspieces somewhat shorter than a puncture, situated below interstrial level. Interstriae convex, shining, 1.5 times as wide as striae.

Femora gently club-shaped swollen in middle part. Protibia with straight outer margin, S-curved interiorly. Metatibia of male weakly sinuate interiorly, without interior blade-shaped edging, distinctly mucronate; in female, metatibia slightly narrowing apically. 1st segment of tarsus triangular, 2nd segment as long as wide. Claw-segment by 0.60 extending beyond lobes of 3rd segment.


Figs 35-39. Brachysomus Schoenh., body $(35,37)$ and scaling of elytra $(36,38,39) .35,36-$ B. villosulus Germ.; 37-39 - B. setiger Gyll.

Body light brown to dark brown, antennae and legs usually light brown. Head, pronotum and elytra densely covered with grey and brown lanceolate scales. Epistomal plate without scales. Elytra with vague spotted pattern of brown scales and short erect lanceolate setae on interstriae. Antennal scape and outer surface of femora and tibiae densely covered with scales and erect setae. Funicle of antennae and inner margin of tibiae with long light hairs. Setae on basal part of elytra suberect, $1 / 3$ width of interstriae; on apical part of elytra erect, with length $1 / 2$ width of interstriae. Head and pronotum with a few erect setae. Abdomen sparsely covered with hair-like setae and hair, but abdominal lobes of 1st ventrite and lateral parts of 2nd and 3rd ventrites with dense lanceolate scales.

Anal ventrite of male without depression, with slightly emarginate apical margin.
Aedeagus weakly sclerotized; median lobe twice as long as apophyses; ventral side, except for distal part, membranous. Ligulae slightly sclerotized (Fig. 190). Spermatheca as in Fig. 158.

Body length 1.90-2.50 mm, width $1.10-1.50 \mathrm{~mm}$; in holotype 2.00 and 1.15 mm , respectively.
Material. Georgia: Abkhazia. Holotype: §, Western Caucasus, Abkhazia, Bzybskii Range, near Khuap Vill., 500 m , pitfall traps, 31 V-25 VIII 1986 (A.G. Koval') (ZIN). Paratypes. 8 ô, 6 , collected with holotype (ZIN); 1 ㅇ, "Abchasia, Sukhum, A. Zolotarew" (ZIN).

Etymology. The new species is dedicated to the collector, Dr Alexander G. Koval'.


Figs 40-43. Brachysomus Schoenh., body (40, 42) and scaling of elytra (41, 43). 40, 41 - B. ponticus Apfb.; 42, 43 - B. commutatus Koštál.


Figs 44-65. Brachysomus Schoenh., head, dorsal (44, 46-48, 50-57, 59, 60, 62-65) and lateral (45, 49, 58, 61) views. 44, 45 - B. simplex sp. n.; 46 - B. fasciatus Strl.; 47 - B. dubius sp. n.; 48, 49 B. hirtus (Boh.); 50 (male), 51 (female) - B. mucronatus sp. n.; $52-$ B. subtilis sp. n.; 53 - B. boroveci sp. n.; $54-$ B. assingi sp. n.; $55-$ B. armatus sp. n.; $56-$ B. commutatus Koštál; $57,58-B$. simulans sp. n.; 59 - B. fallax sp. n.; 60, 61 - B. curvimanus sp. n.; 62 - B. mikati Koštál; 63 - B. albanicus Apfb. (lectotype); $64-B$. rhinomioides Košt’ál; 65 - B. argutus sp. n.

Figs 66-73. Brachysomus Schoenh., pronotum, lateral view $(66,67)$; anal ventrite of male (68, 69) and right metatibia of male (70-73). 66, 70 - B. argutus sp. n.; 67, 71 - B. rhinomioides Koštál; 68 - B. albanicus Apfb. (lectotype); 69 - B. pelex sp. n.; 72 - B. mikati Koštál; 73 - B. fallax sp. n.

Figs 74-93. Brachysomus Schoenh., right antenna. 74 B. simplex sp. n., $75-$ B. dubius sp. n., $76-B$. subtilis sp. n., $77-$ B. mucronatus sp. n., 78 - B. hirtus (Boh.), 79 - B. fasciatus Strl., 80 - B. hegyessyi sp. n., 81 B. villosulus Germ., 82 - B. merkli sp. n., $83-$ B. polonicus Wanat \& Mazur, 84 - B. tenuicollis sp. n., 85 - B. sulcatus Yun., 86 - B. alexeevi sp. n., 87 - B. pelex sp. n., 88 - B. assingi sp. n., 89 B. simulans sp. n., $90-$ B. boroveci sp. n., $91-$ B. fallax sp. n., 92 - B. rhinomioides Košťál, 93 B. argutus sp. n.



Figs 94-110. Brachysomus Schoenh., right pro- (94-99) and metatibia (100-110) of male. 94, 103 - B. simplex sp. n.; 95, 104 - B. dubius sp. n.; 96, 105 - B. mucronatus sp. n.; 97, 106 - B. hirtus (Boh.); 98, 107 - B. subtilis sp. n.; 99 - B. curvimanus sp. n.; 100 - B. ellipticus sp. n.; 101 - B. kovali sp. n.; 102 - B. kubanensis Rtt.; 108 - B. pelex sp. n.; 109 - B. albanicus sp. n.; 110 - B. armatus sp. n.


Figs 111-116. Brachysomus Schoenh., anal (111) and first $(112,113)$ ventrites (schematic) and tarsus (114-116). $111-$ B. dubius sp. n.; 112, $114-$ B. merkli sp. n.; 113 - B. polonicus Wanat \& Mazur and B. tenuicollis sp. n.; 115 - B. polonicus; 116 - B. tenuicollis sp. n.


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Figs 117-135. Brachysomus Schoenh., vestiture of elytra (117-131), setae on elytra (132, 133), lateral view, and scaling of antennal scape (134, 135). 117 - B. simplex sp. n., 118 - B. merkli sp. n., 119 - B. tenuicollis sp. n., $120-$ B. sulcatus Yun., 121 - B. polonicus Wanat \& Mazur, $122-$ B. dubius sp. n., 123 - B. alexeevi sp. n., 124 - B. albanicus Apfb., 125 - B. fallax sp. n., 126 - B. mikati Košt'ál, 127 (scaling of pronotum), 128 (scaling of elytra) - B. assingi sp. n., 129 - B. simulans sp. n., 130 - B. commutatus Košt'ál, 131 - B. armatus sp. n., 132 - B. hirtus (Boh.) and B. mucronatus sp. n., 133 - B. subtilis sp. n., 134 - B. commutatus Košt'ál, 135 - B. simulans sp. n.


Figs 136-160. Brachysomus Schoenh., spermatheca. 136 - B. simplex sp. n., 137 - B. hirtus (Boh.), 138 - B. fasciatus Strl., 139 - B. mucronatus sp. n., 140 - B. subtilis sp. n., 141 - B. hegyessyi sp. n., 142 - B. pelex sp. n., 143 - B. albanicus Apfb., 144 - B. boroveci sp. n., 145 - B. simulans sp. n., 146 - B. oertzeni Fst. (lectotype), 147 - B. assingi sp. n., 148 - B. commutatus Koštál, 149 - B. curvimanus sp. n., 150 - B. fallax sp. n., 151 - B. mikati Košt’ál, 152 - B. rhinomioides Košt’ál, 153 B. alexeevi sp. n., 154 - B. sulcatus Yun., 155 - B. merkli sp. n., 156 - B. ponticus Apfb., 157 - B. tenuicollis sp. n., 158 - B. kovali sp. n., 159 - B. kubanensis Rtt., 160 - B. ellipticus sp. n.


Figs 161-174. Brachysomus Schoenh., aedeagus (161-170, 172), dorsal view; apex of penis, lateral (171) and dorsal (174) views, and armature of internal sac (173). 161 - B. dubius sp. n.; 162 - B. subtilis sp. n.; 163 - B. fasciatus Strl.; 164 - B. hirtus (Boh.); 165 - B. mucronatus sp. n.; 166 - B. mikati Koštál; 167 - B. fallax sp. n.; 168 - B. hegyessyi sp. n.; 169, 173 - B. pelex sp. n.; 170, 171 - B. armatus sp. n.; 172, 174 - B. assingi sp. n.


Figs 175-178. Brachysomus Schoenh., aedeagus, dorsal (175) and lateral (177) views, and apex of penis, dorsal view $(176,178) .175-177-$ B. setiger Gyll., 178 - B. villosulus Germ.


Figs 179-188. Brachysomus Schoenh., aedeagus (179-181, 185-188); apex of penis, dorsal view (182), and armature of internal sac (183, 184). 179, 183, 184 - B. rhinomioides Košt́ál; 180 - B. simulans sp. n.; 181, 182 - B. argutus sp. n.; 185 - B. boroveci sp. n.; 186 - B. commutatus Košťál; 187 - B. curvimanus sp. n.; 188 - B. ponticus Apfb.


Figs 189-194. Brachysomus Schoenh., aedeagus. 189, 194 - B. kubanensis Rtt. (189 - Adygea, Kuzhorskaya Vill.; 194 - Krasnodar Terr., Goryachii Klyuch Town); 190 - B. kovali sp. n.; 191 - B. ? kubanensis (Abkhazia, Turetskaya Shapka Mt.); 192 - B. albanicus Apfb.; 193 - B. ellipticus sp. n.


Figs 195-198. Brachysomus Schoenh., aedeagus (195, 197, 198) and spermatheca (196). 195, 196 - B. polonicus Wanat \& Mazur; 197 - B. alexeevi sp. n.; 198 - B. sulcatus Yun.


Figs 199-201. Brachysomus Schoenh., internal sac of aedeagus. 199 - B. ellipticus sp. n., 200 B. kubanensis Rtt., 201 - B. albanicus Apfb.


Figs 202-205. Brachysomus Schoenh., armature of internal sac of aedeagus. 202 - B. commutatus Košťál, 203 - B. boroveci sp. n., 204 - B. mikati Koštál, 205 - B. assingi sp. n.

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