

# NEW TAXA OF CERAMBYCIDAE FROM TURKEY AND TRANSCAUCASIA (COLEOPTERA)

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## ABSTRACT

### **New taxa of Cerambycidae from Turkey and Transcaucasia (Coleoptera).**

Three new taxa are described. *Cortodera colchica kalashiani* **ssp. n.** from Armenia is represented by totally black parthenogenetic population, and so it is analogous to *C. c. danczenkoi* Danilevsky, 1985 from Azerbaidzhan. *Asias agababiani* **sp. n.** from Armenia with very short antennae seems to be not close to any other species of the genus. *Pseudosphegestes samai* **sp. n.** from Turkey is geographically and taxonomically intermediate between *P. brunnescens* (Pic, 1897) and *P. longitarsus* Holzschuh, 1974. Distinguishing characters, relative connections and areas are discussed. All descriptions are supplied with colour photographs.

**Key words:** Coleoptera, Cerambycidae, new species, new subspecies, Armenia, Turkey.

## INTRODUCTION

Recently I was happy to receive extremely interesting Cerambycidae materials collected by my friends and colleagues in Turkey and Transcaucasia. Several series were identified by me as new taxa. The descriptions of three of them are presented now.

### *Cortodera colchica kalashiani* **ssp. n.** (Fig. 1)

#### Description

Female (males absent). Body entirely black, including mouthparts, elytrae, antennae and legs; only mandibles with a brownish spot near apices and 1st antennal joint sometimes a little lightened internally.

Frons and vertex with very dense contiguous punctures, covered by strong erect black setae; clypeus with sparser punctures; interantennal tubercles indistinct; eyes slightly concave internally; tempora relatively short.

Antennae slightly surpassing the elytral half; 1st joint about as long as 3rd, which is equal to 5th; 4th much shorter; 2nd joint slightly longer than wide or about as long as wide.

Prothorax about 1.2 times wider than long, evenly rounded laterally; pronotum convex, slightly concave along the middle, with dense regular punctures, with narrow

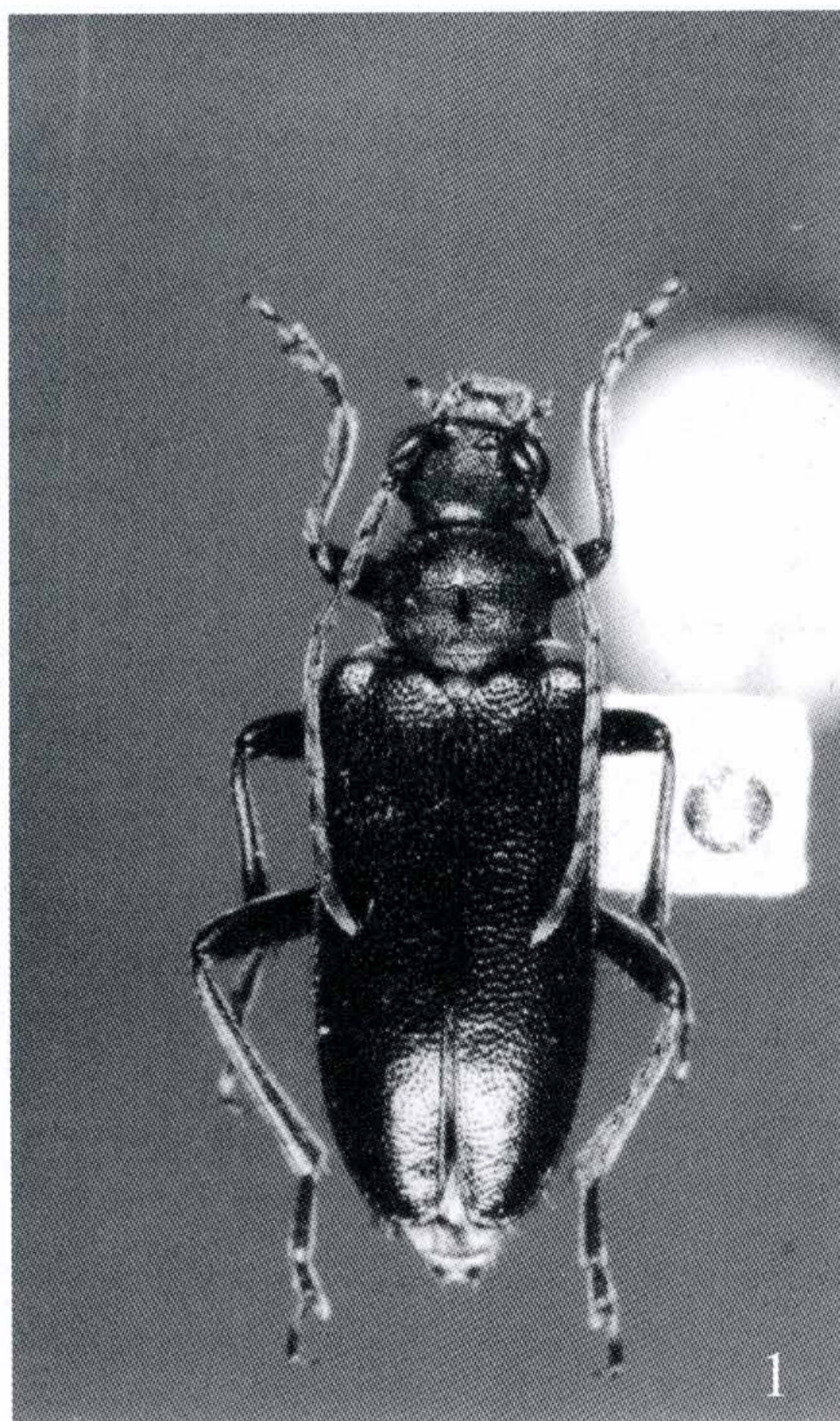


Fig. 1: *Cortodera colchica kalashiani* ssp. n., holotype.

smooth dim longitudinal line along middle; covered with short semierect and longer erect black setae. Scutellum about as long as wide, with nearly parallel sides, rounded posteriorly.

Elytrae parallelsided with very dense regular punctures, covered by moderately short semierect black setae, with some longer erect setae near base; about 2.0 times longer than basal width; apices rounded.

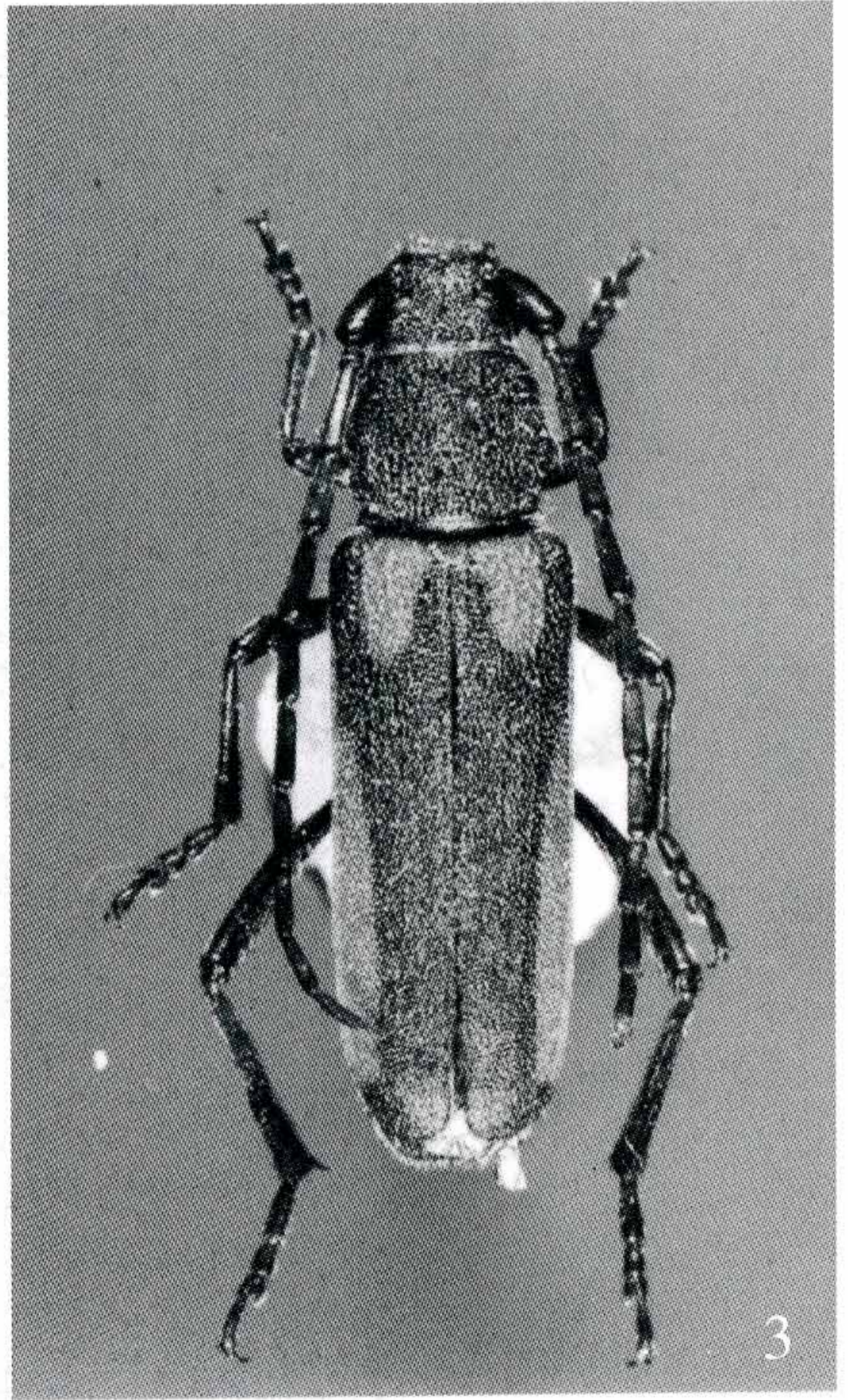
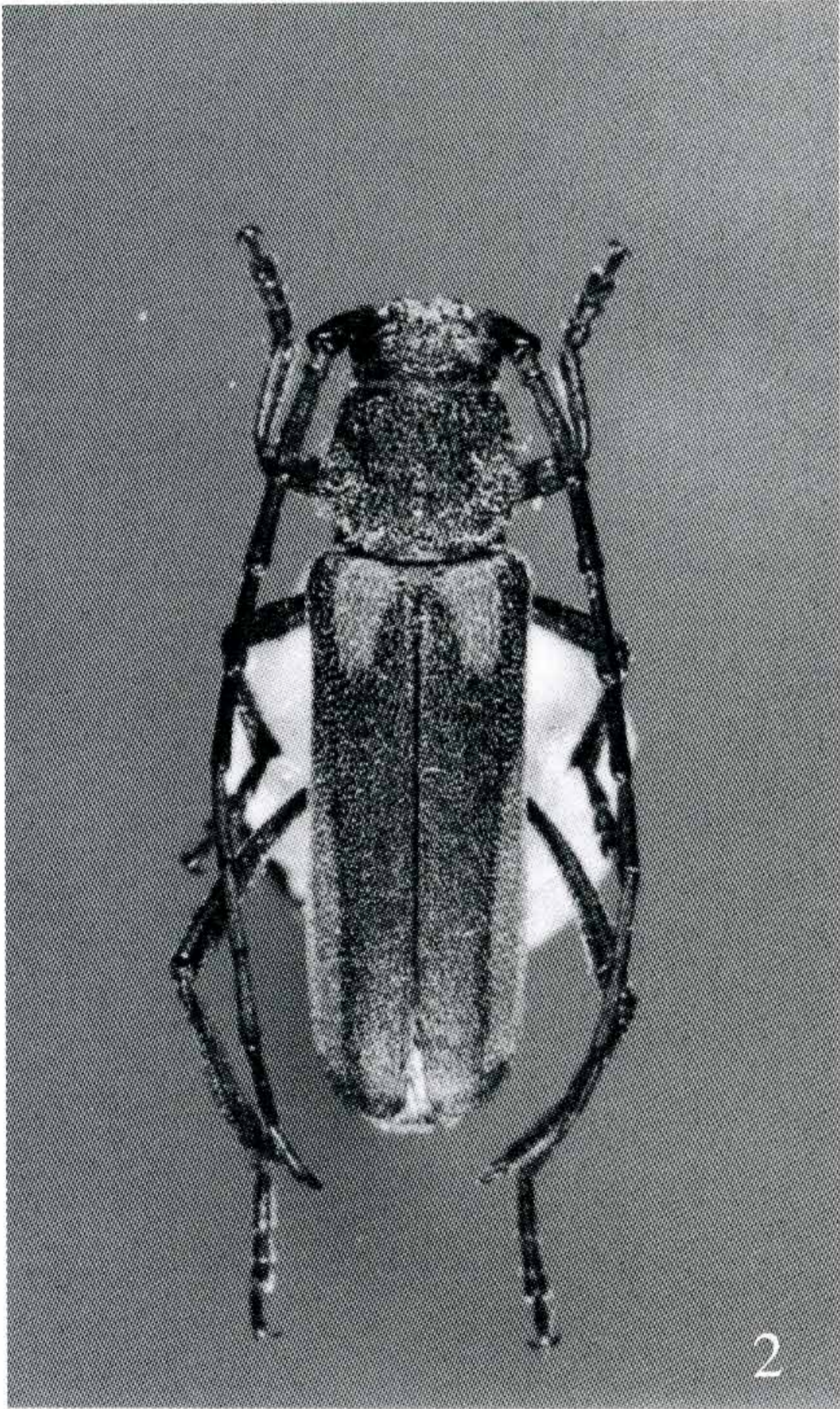
Legs with 1st joint of hind tarsi longer than 2nd and 3d together.

Ventral body surface with dense, moderately long, appressed, and sparser, longer, erect, silvery pubescence. Abdomen with rounded posterior margins of last segment.

Body length: 10.3-12.8 mm; body width: 3.1-4.1 mm.

#### Discussion

*Cortodera colchica* Reitter, 1890 consists of a number of morphologically peculiar local populations, most of which could be regarded as good subspecies. The main reason for the current description is the parthenogenetic character of *C. c. kalashiani*, which is rather unusual for the species. Up to now only one more *C. colchica* population was known as parthenogenetic: *C. c. danczenkoi* Danilevsky, 1985 (DANILEVSKY & MIROSHNIKOV, 1985) from Talysh mountains in Azerbaidzhan (see also DANILEVSKY, 1987). Bisexual populations of *C. colchica* are characterised by very high degree of individual variability of coloration: elytrae



Figs. 2-3: *Asias agababiani* sp. n.: male, holotype (2); female, paratype (3).

black, or orange with black portions, or totally orange; legs black or red; the red legs can be combined with black elytrae or contrary - black legs with orange elytrae. Parthenogenetic populations always consist of totally black specimens.

*C. c. kalashiani* differs from *C. c. danczenkoi* by evenly rounded, less wide prothorax (in *C. c. danczenkoi* it is about 1.5 times wider than long and slightly angulated laterally); by much darker dorsal body pubescence, which is considerably paler in *C. c. danczenkoi*; by much longer abdominal pubescence.

#### Material

Holotype: female, Armenia, Tzahkari lake, 5 km W Megri pass, 2,700 m, 14.7.1997, K. Agababian leg. (author's collection); 14 paratypes: 6 females with same label; 7 females, Armenia, Megri, Kaler, 2,500 m, 20.7.97, K. Agababian leg.; 1 female, Armenia, Megri distr., south slope of Mt. Kapudzhukh, 2,900 m, 15.7.97, K. Agababian leg. (author's collection and collection of M. Kalashian).

I dedicate the new taxon to my friend Dr. M. Kalashian (Erevan, Armenia), with sincere gratitude for providing me with the materials for description.

#### *Asias agababiani* sp. n. (Figs. 2-3)

#### Description

Body moderately short and wide, black, elytrae black with relatively constant red areas.

Head with very dense, irregular, partly conjugated punctuation, covered with short, erect, pale or brownish setae; frons usually with deep median groove, slightly prolonged to the vertex; antennal tubercles short, angulated; subfossal tubercles usually angulated or rounded; genae very short; labrum relatively wide with nearly straight anterior margin.

Antennae thick and short, 11-segmented, covered with short black appressed setae; in males a little longer than body, usually surpassing the elytral apex by one joint or only by the apical half of the last joint, rarely by two apical joints; in females always shorter than body, reaching apical elytral 5th or 6th; 3rd antennal joint short, in males not more than 1.2 times longer than 1st or sometimes about equal in length to 1st; in females about as long as 1st; 4th - 10th joints with distinct outer angles; apical joint with very short but distinctly pronounced appendix.

Prothorax about as long as large at the base, posteriorly a little wider than anteriorly, widest behind middle, lateral tubercles small and rounded but distinct. Pronotum not even, with more or less manifested impressions: small transverse impression along anterior margin, more pronounced laterally, and two oblique lateral impressions behind middle, which can be rather deep, with small tubercles behind each, just before posterior margin; pronotal punctuation dense and deep irregular, partly conjugated and slightly rugose; pronotum covered with short, sparse, erect or oblique pale or brownish setae and very short, appressed, sparse, pale pubescence, not hiding sculpture; ventral surface of the prothorax bearing moderately short, erect, oblique and appressed pale setae.

Scutellum small, triangular or nearly oval, slightly transverse or slightly elongate, covered with short, pale, appressed pubescence.

Elytrae from 2.3 to 2.6 times longer than basal width; certain males can be wider than females; elytral apices separately rounded; about anterior half or anterior third of elytrae with deep dense punctuation, diminishing backwards; posteriorly the punctuation becomes very small and less pronounced; erect pubescence nearly absent, only short single pale erect setae present just near base; scarce appressed pubescence pale and very short; two red areas of each elytron moderately small: the narrow longitudinal lateral line begins just beneath the humeri, widened behind middle, but never reaching the apex; the oval basal longitudinal area is narrowed posteriorly and can be nearly triangular, from 2 to 1.5 times longer than wide, sometimes nearly reaching the scutellum.

Legs relatively short, covered with short strong semierect or appressed setae, erect setae absent; femora slightly thickened; hind femora nearly parallelsided, never reaching elytral apex, about 1.5 times longer than hind tarsi; 1st joint of hind tarsus rather shorter than others combined.

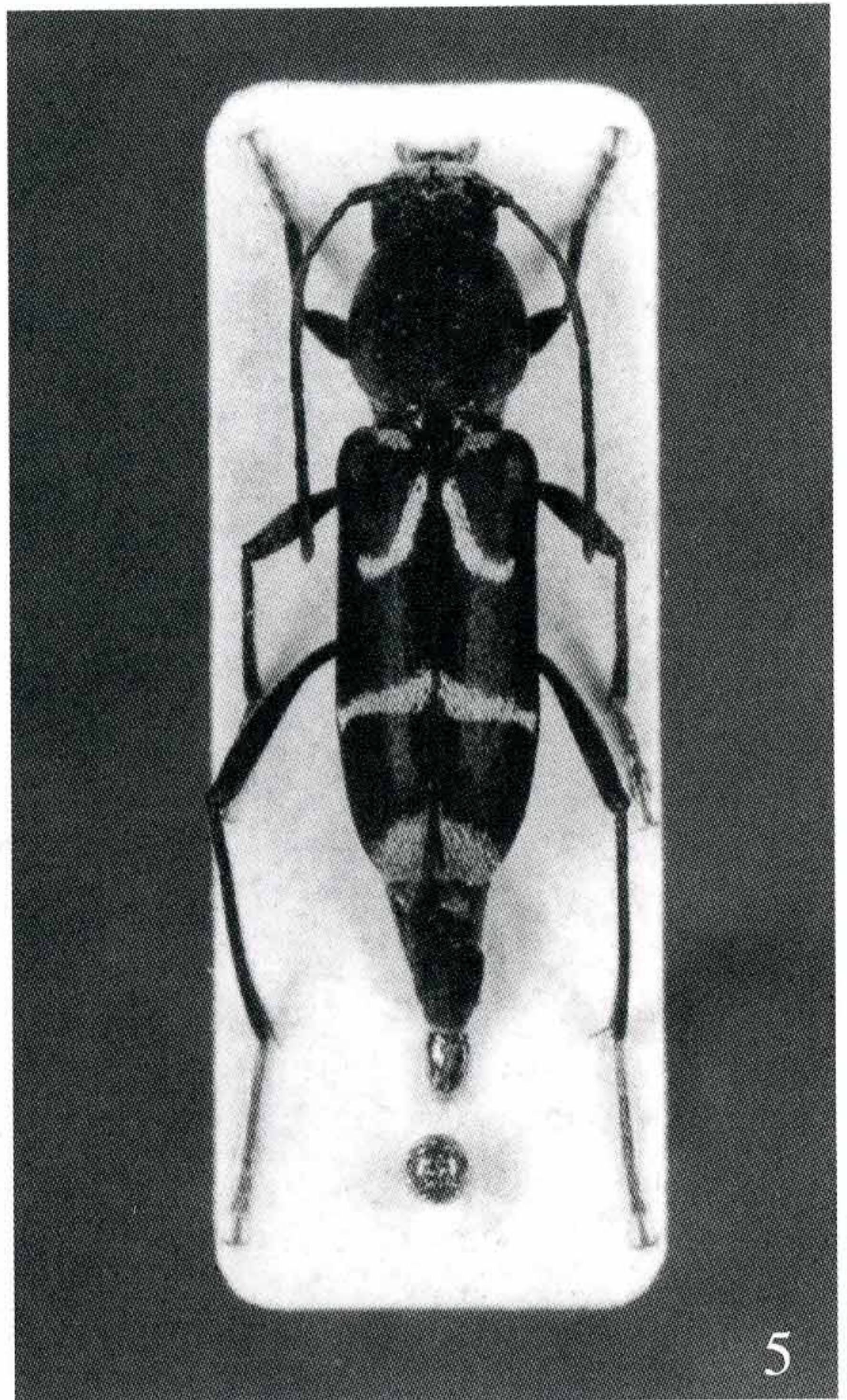
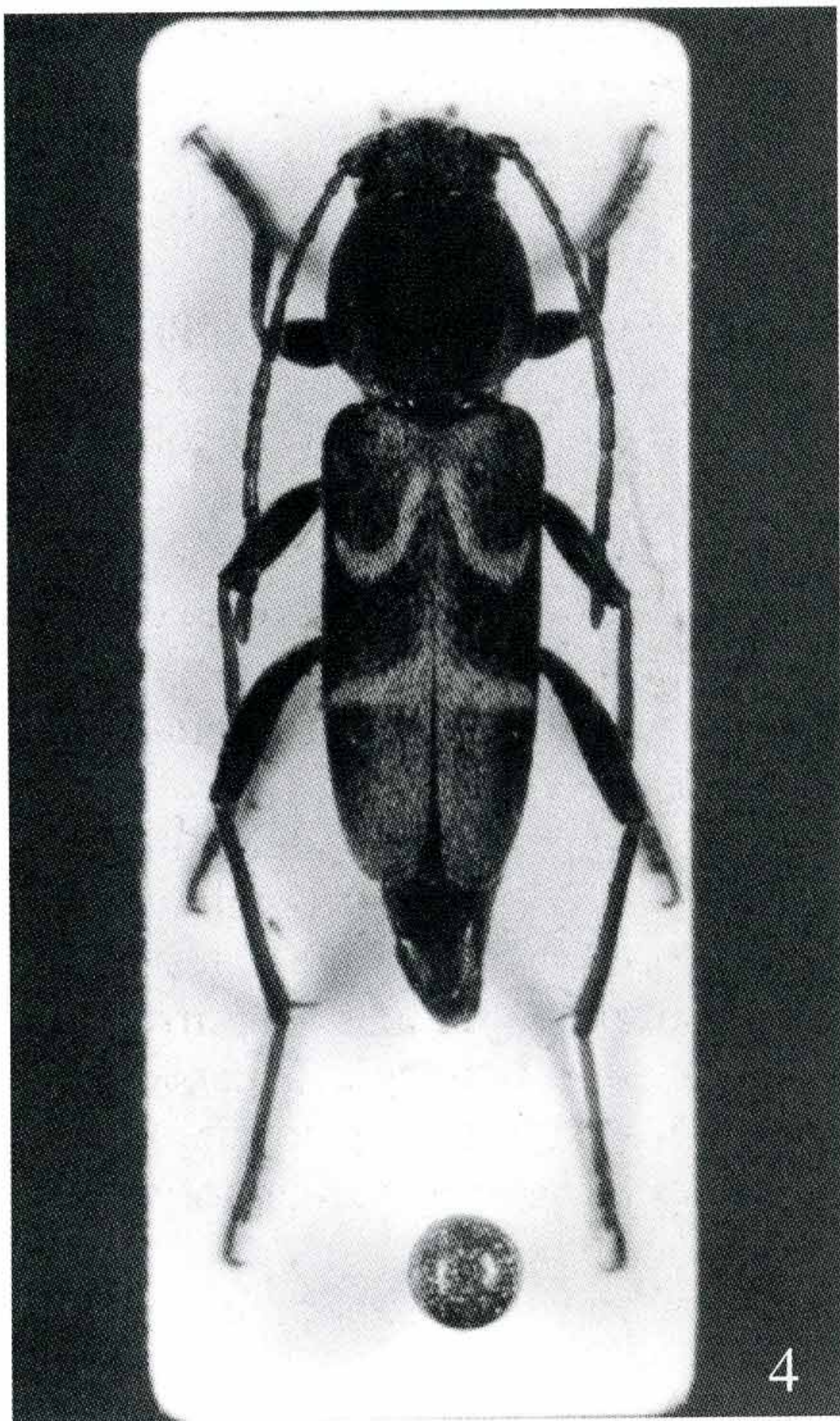
Ventral body surface bearing fine, pale, short, appressed hairs and longer, sparse, semierect hairs; posterior borders of abdominal sternites glabrous; posterior margin of last abdominal segment transversely truncate usually with small apical notches, more developed in males and absent in last female sternite.

Aedeagus apex very short and wide, but sharply pointed; parameres very short and widely rounded with short very dense setae.

Body length in males: 11.0-13.1 mm, in females: 14.2-14.3 mm; body width in males: 2.8-3.6 mm; in females: 3.8-3.9 mm.

#### Discussion

*Asias agabiani* has no relatives among known species of the genus. It seems to be close to *A. forticornis* (Reitter, 1901) by the short and wide body, the short



Figs. 4-5: *Pseudosphegastes samai* sp. n.: male, holotype (4); female, paratype (5).

antennae with 3rd joint short, form and sculpture of prothorax and elytral design; but in *A. forticornis* the antennae are rather shorter: in males they are never longer than body, in females they hardly reaches the elytral middle; body pubescence distinctly longer, the abdominal pubescence hiding its sculpture; erect hairs near elytral base longer and more numerous.

The geographically nearest *Asias* species of the group (with short antennae) is *A. jomudorum* Plavilstshikov, 1940 from Kopet-Dag mountains in Turkmenien Republic. But all known specimens of the species have more reduced black elytral area: in form of oval blotch in posterior two elytral thirds; the antennae are also very short, relatively as long as in *A. forticornis*.

Another *Asias* species from Caucasus is represented by the local population of *A. ephippium* (Steven & Dalman, 1817) in Dagestan. Specimens from this population are not very typical to the species and in fact Caucasian *A. ephippium* could be regarded as separate subspecies. Its males bear often short antennae, only a little longer than body, but all other characters are typical to the «*halodendri-ephippium*» group: elytrae narrow, about 3 times longer than joint basal width, pronotum relatively even with rather regular punctuation, covered with long erect dark setae as well as basal elytral portion, 3d antennal joint and legs relatively long.

## Material

Holotype, male, Armenian Republic, Megri env., Artsvakar, 1.7.1997, K. Agababian leg. (author's collection); 11 paratypes: 1 male and 2 females from same locality, 25.6-1.7.97, K. Agababian leg. (author's collection); 5 males with same data (K. Agababian's collection, Erevan); 2 males and 1 female from same locality, 21.6.1997, M. Kalashian leg. (M. Kalashian's collection, Erevan).

## *Pseudosphegistes samai* sp. n. (Figs. 4-5)

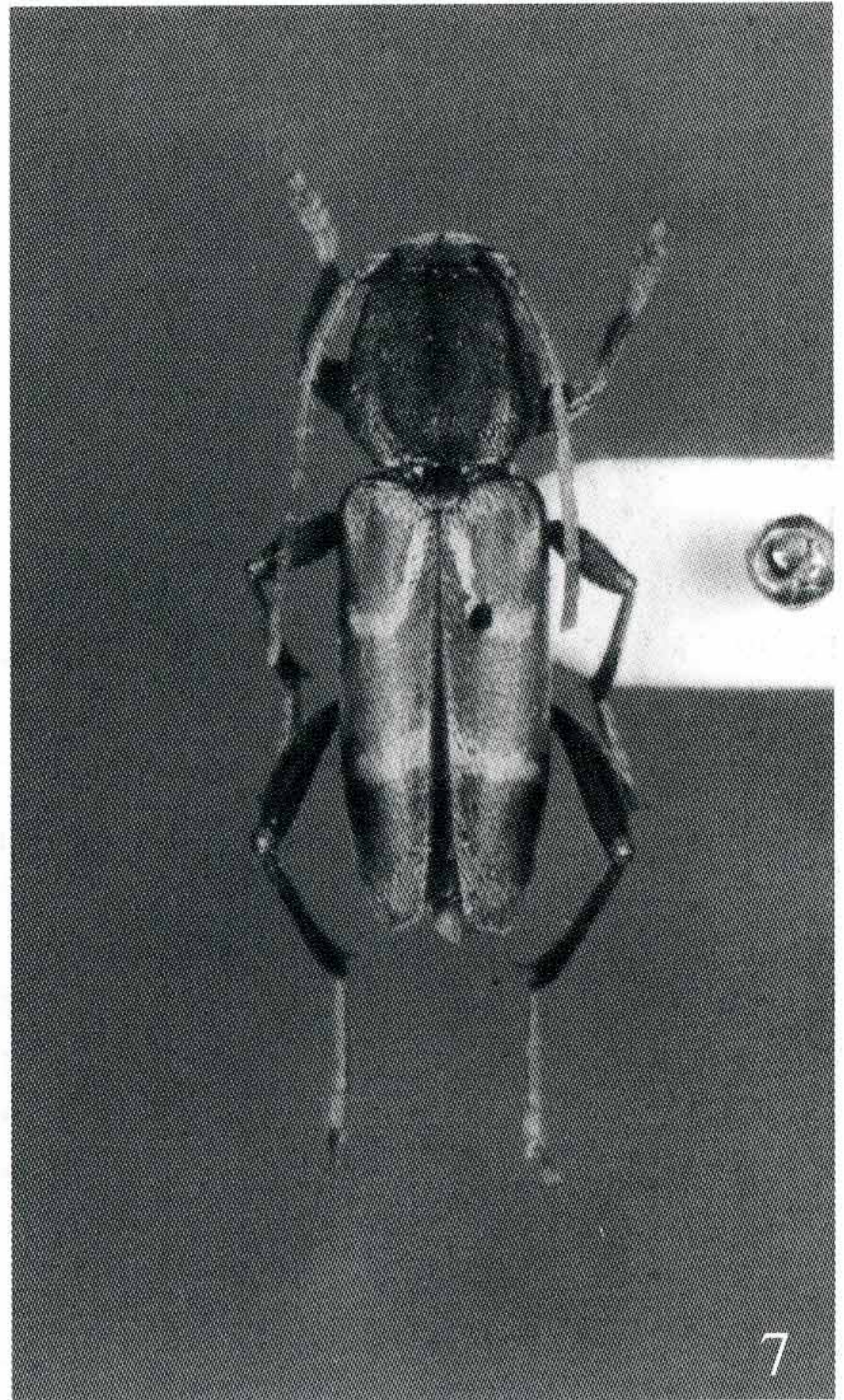
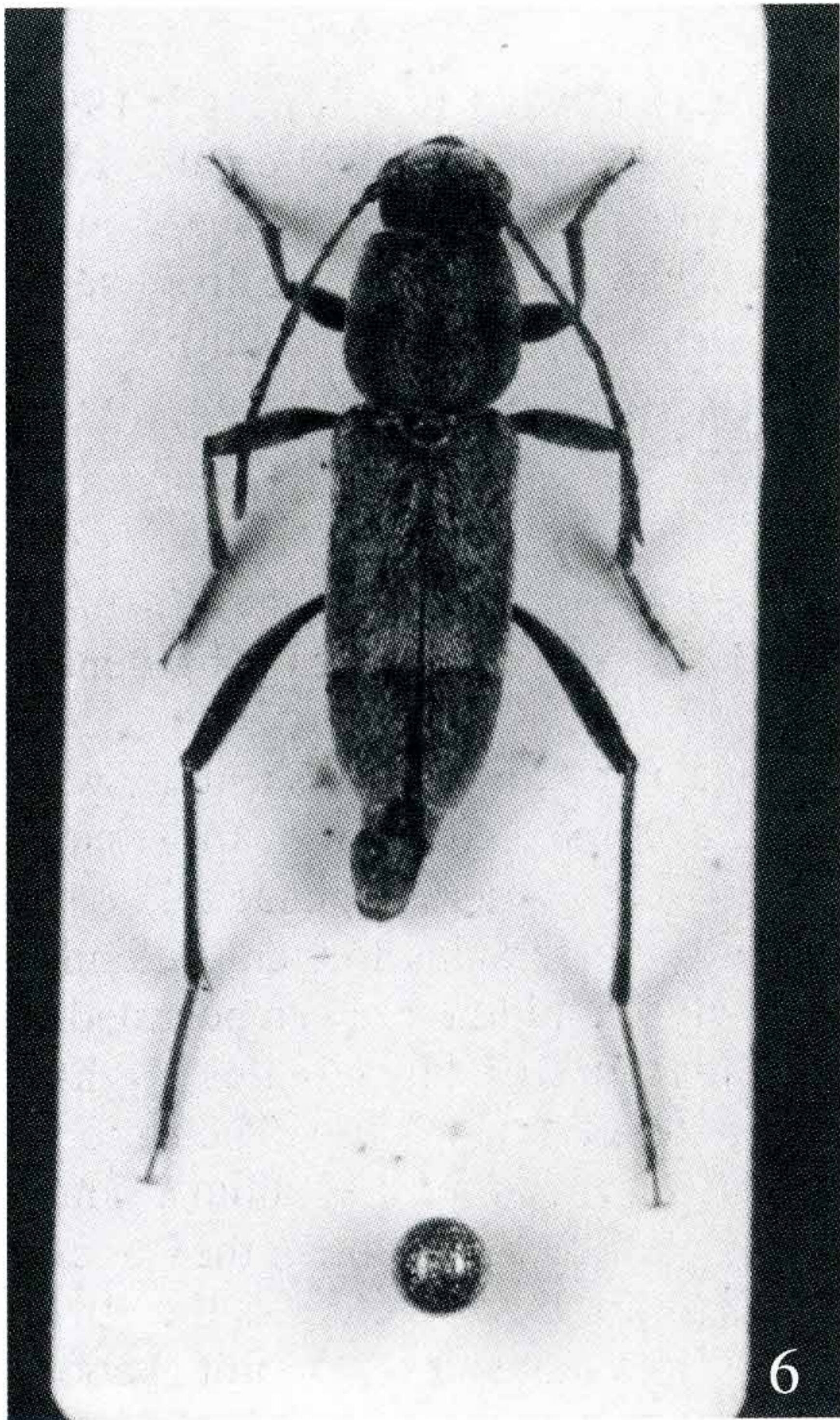
### Description

Body dark-brown, nearly black; tarsi, tibiae (mostly the anterior ones), usually basal half of antennae (or sometimes antennae totally) and palpi slightly lightened, or antennae not lightened.

Head with small, very dense, partly contiguous punctuation; frons usually with narrow, shining, central line; head pubescence dense, short and appressed, pubescence of frons and genae longer and partly erect or semierect; genae relatively long, in males about as long as the lower eye lobe, in females longer. Antennae widened apically in both sexes, in males reaching elytral middle or even postmedial elytral strip, strongly exceeding the premedial clytral strip, in females slightly exceeding the premedial elytral strip or reaching the elytral middle. The ratio of antennal joints is in general rather variable: in males the 3rd joint is about 2 times longer than the 2nd, 1.2 times shorter than the 1st, slightly shorter than the 4th and 1.4 times shorter than the 5th; sometimes the 3rd joint is about as long as the 4th or even longer, but the 5th joint is usually the longest; in females the 3rd joint is about 1.8 times longer than the 2nd, 1.1 times shorter than the 1st and slightly longer than the 5th; or the 3rd joint is about 2.4 times longer than the 2nd, slightly shorter than the 1st, about 1.1 times longer than the 4th, which is equal to the 5th.

Prothorax in both sexes about as wide as long, slightly transverse or slightly elongate; in males strongly widened posteriorly with posteriorly diverging sides; in females with more rounded sides, usually widest behind middle or sometimes at middle. Pronotum strongly convex along the median line, with shallow depression before middle, with rather rough granulated sculpture; in males with narrow median row of strong transverse asperities, with two lateral crescent-like areas of more rough sculpture, which can be slightly depressed anteriorly; sometimes the median row of asperities is poorly pronounced and the crescent-like areas are indistinct; in females the pronotal longitudinal asperate area is larger, with less distinct borders, strongly enlarged medially; lateral shallow depressions sometimes well developed. Central asperate pronotal area with very short indistinct black setae, nearly glabrous; lateral parts covered with short dense white setae, which are often denser along the crescent-like areas in males; ventral side of prothorax with denser and longer white setae. Scutellum transverse, oval, densely punctate, with dense short dark, or pale, or mixed setae.

Elytrae in males 2.1-2.3 times longer than the basal width, in females 2.0-2.3 times; with short, dense, black, appressed pubescence. Four areas are covered with short, white setae (cuticle underneath never lightened), which are usually denser in females: basal transverse band around scutellum, which usually does not reach the humeral angles and sometimes in males is poorly developed; curved premedial band from near external margin of dorsal elytral surface (far from external elytral margin) to scutellum, in males usually fused with basal band, in females usually not fused,



Figs. 6-7: *Pseudosphegestes longitarsus* Holzschuh, male (6). *Pseudosphegestes brunnescens* (Pic), male (7).

posterior part of premedial band in males sometimes enlarged; transverse, slightly oblique postmedial band from external elytral margin to suture, always enlarged anteriorly (and sometimes posteriorly) along suture and sometimes along lateral margins; wide apical area with usually sparse white setae, with sometimes indistinct borders in males. The borders of white elytral bands in females are always very distinct, in males often diffused as ground black pubescence often mixed with white setae, so sometimes male elytrae look partly greyish, with poorly pronounced pale band along the suture. External apical elytral angle slightly pointed.

Legs moderately long, covered with pale or mixed erect, semierect and appressed setae, with moderately thickened femura; posterior tarsi about two times (or less) longer than anterior; 1st joint of posterior tarsi from 1.3 to 1.6 times longer than all other together.

Ventral body surface covered with pale, sparse, erect hairs and dense, white, appressed setae, forming bright white blotches on mesepisternum, posterior half of metepisternum and along the posterior borders of two anterior abdominal sternites, sometimes white bands of abdominal sternites indistinct (in some males) or rather distinct on three anterior abdominal sternites. Males with pygidium and last abdominal sternite rounded, postpygidium distinctly emarginated; females with last ab-

dominal tergite truncate or slightly emarginated, last sternite rounded, or truncate, or emarginated.

Aedeagus not pointed apically, parameres long and narrow with very long setae.

Body length in males: 7.4-11.0 mm, in females: 8.8-13.5 mm; body width in males: 2.2-2.9 mm, in females: 2.3-4.0 mm.

#### Discussion

*P. samai* seems to be morphologically and geographically intermediate between *P. longitarsus* Holzschuh, 1974 (Fig. 6) and *P. brunnescens* (Pic, 1897) (Fig.7). All known to me specimens of *P. brunnescens*, including its holotype and holotype of *P. circassicus* (Pic, 1905), show brown or pale-brown body, antennae, elytrae and legs; male prothorax red-brown; crescent-like areas of male pronotum are very distinct and always manifested by dark colour (as well as the central asperate line), without rough sculpture, with distinct white hair strips above; dark ground pubescence of male elytrae never mixed with white setae, so the premedial and postmedial white elytral hair stripes are always very distinct. *P. longitarsus*, according to the original description of a female and two males from my collection (males were unknown before), is dark-coloured; the males are brown, with reddish prothorax, the female nearly black; the male antennae are relatively short, getting across premedial elytral hair stripe, not reaching the elytral middle; the male prothorax is slightly longer than wide, the crescent-like pronotal areas are poorly developed, slightly darker than pronotum with rougher sculpture; the male pronotum is evenly covered with white setae, as well as elytrae; elytral stripes slightly marked by condensed white setae, nearly indistinct; ventral body side with much denser white pubescence than in other species.

#### Material

*P. samai* sp. n.: Holotype, male, Turkey, Tokat, 8 km north Niksar, 24.5.1998, S. Lundberg leg. (author's collection); 37 paratypes: 4 males and 7 females with same label; 6 males and 13 females from same locality, 20.5.96, 19.5.97, R. Pettersson leg.; 1 male and 1 female, Turkey, Ordu, Akkus, south Camici, 20.5.96, R. Pettersson leg.; 1 male, Turkey, Giresun, Findikbel Gec., 20.5.97, S. Lundberg leg.; 1 male and 2 females, Turkey, 28 km south Akkus, 29.5.96, S. Lundberg leg. (collections of Mr. S. Lundberg, Lulea, Sweden; Dr. R. Pettersson, Umea, Sweden; Dr. G. Sama, Cesena, Italy and author's collection).

*P. brunnescens*: 6 specimens: 1 female (holotype of *Clytus brunnescens* Pic), «Tiflis» - now Tbilisi, Georgia; 1 male (holotype of *Clytus circassicus* Pic), «Circassia, Sotscha» - now Sochi, North-West Caucasus, Russia (Muséum National d'Histoire Naturelle, Paris); 1 male, north-west Caucasus, Abkhazia, Gagry, 3.8.1919; 1 female, Georgia, Gory, 22.6.1982, V. Kuznetzov leg.; 1 female, north-west Caucasus, Sochi env., near Lazorevskoe, aul Kirova, 10.6.1985, A. Koval leg.; 1 female, south-west Transcaucasie, Adzharia, Shuakhevi env., Tzinareti, 800m, 25.7.1988, M. Danilevsky leg. (author's collection).

*P. longitarsus*. 2 specimens: 1 male, Turkey, Gyndogmus, 600 m, 1.6.1988, S. Lundberg leg.; 1 male, Turkey, V. Termessos, 600 m, 13.6.1994, S. Lundberg leg. (author's collection).

Mr. S. Lundberg, Dr. R. Pettersson and me, we are glad to dedicate the new species to Dr. Gianfranco Sama (Cesena, Italy) with wishing him to prolongate successfully his very interesting study of Palaearctic Cerambycidae.



## ACKNOWLEDGEMENTS

I am very grateful to my colleagues who provided me with the materials for study: Dr. M. Kalashian (Erevan, Armenia), Dr. S. Lundberg (Lulea, Sweden), Dr. R. Pettersson (Umea, Sweden), Dr. G. Sama (Cesena, Italy). I express my special gratitude to Dr. Jean J. Menier (Muséum National d'Histoire Naturelle, Paris, France) for the loan of type specimens.

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