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Ptinidae of China II. - Subfamilies Ernobiinae, Eucradinae and Ptilininae (Coleoptera: Bostrichoidea: Ptinidae)

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Abstract. Ptinidae are represented by 69 species in China until now, from which only 10 species belong to the subfamily Eucradinae; 2 species belong to the subfamily Ernobiinae and 4 species belong to the subfamily Ptilininae, especially from continental China, but from Taiwan, too. Fourteen species are newly described from these subfamilies, namely *Anhedobia dulcis* sp. nov., *Ptinomorphus knizeki* sp. nov., *P. tryznai* sp. nov., *Clada* (*Clada*) *kucerai* sp. nov., *C.* (*C.*) *yunnanensis* sp. nov., *C.* (*C.*) *monikae* sp. nov., *C.* (*C.*) *zdeneki* sp. nov., *C.* (*C.*) *borowskii* sp. nov., *C.* (*C.*) *parva* sp. nov. (all from Eucradinae), *Ernobius sakai* sp. nov. (Ernobiinae), *Indanobium chinensis* sp. nov., *Ptilinus kejvali* sp. nov., *P. gerakeorum* sp. nov., *P. similis* sp. nov. (all from Ptilininae).

INTRODUCTION

The fauna of China is known very poorly; only 69 species were recorded from China (Zahradník 2012). In the world, the subfamily Eucradinae is represented by 6 genera, from them 3 genera have been known until now from China (*Anhedobia* Nakane, 1963; *Clada* Pascoe, 1887, and *Hedobia* Dejean, 1821) with 10 species distributed in China and neighbouring countries; the subfamily Ernobiinae is represented by 15 genera, from them 2 genera (*Ernobius* Thomson, 1859, and *Xestobium* Motschulsky, 1845) are known from China (both with cosmopolitan distribution), and the subfamily Ptilininae is represented by 8 genera, from them 3 are distributed in China (*Indanobium* Español, 1970; *Ptilinus* Geoffroy, 1762, and *Yunnanobium* Español, 1965) with 4 species, from them 2 species are in the genus *Ptilinus* with cosmopolitan distribution (Zahradník 2007, 2012; Zahradník & Háva, in press).

Basic information about the genus *Ptinomorphus* Mulsant et Rey, 1868 was published by Español (1970). Logvinovskiy (1978, 1985) gave keys of species from the East-Palaearctic Region with descriptions of new species. Recently, Toskina (2001) also described some new species from Central Asia.

Species from the genus *Clada* Pascoe, 1887 from this region are published only in original descriptions, without any revision. Only Sakai (1987) published complete information about this genus (with description of a new subgenus) from Taiwan.

A revision of Palaearctic *Ernobius* Thomson, 1859 species was published by Johnson (1975). Logvinovskiy (1977) published a review of the genus *Ernobius* from former Soviet Union and Toskina (2002) published some new species from the Palaearctic Region. Some other authors published separated new species from different countries in the Palaearctic

Region, especially from Europe and neighbouring countries (Español 1977; Gottwald 1971; Logvinovskiy 1977; Lohse 1991; Macháček 2007; Novoa & Baselga 2000; Sakai 2002; Zahradník 1998, 2000).

There is an only recent publication about Palaearctic species of the genus *Ptilinus* Geoffroy, 1762, with descriptions of few new species (Toskina 1995). Logvinovskiy (1976) and Español (1965) also gave information about Palaearctic species from this genus.

Español (1965) described the genus *Ptilinomorphus* (with subgenus *Indanobium,* which is nomen nudum; *Indanobium* Español, 1970 is correct) and incorporated up to now described species into this genus and subgenera.

MATERIAL AND METHODS

The subfamily Ernobiinae is represented by 15 genera world-wide with more than 150 species and subspecies. The subfamily Eucradinae is represented only by 6 genera distributed in Old World and North America, with more than 70 species. The subfamily Ptilinidae is represented by 8 genera distributed world-wide except in the Australian Region, with more than 60 species.

I have studied original descriptions of all the Chinese species from these subfamilies (DeGeer 1774; Geoffroy 1785; Kôno & Kim, 1937; Linnaeus 1758; Pic 1903, 1907, 1926, 1933, 1944; Reitter 1877; Sakai 1987) and many materials from China from different collections (from museums and private collections, including my collection from collecting of my colleagues and friends, who provided and donated me their materials), together almost 50 specimens.

I use the following abbreviations in the paper:

NHMBS Naturhistorisches Museum, Basel, Switzerland;
PZPC private collection of Petr Zahradník, Prague, Czech Republic.

DESCRIPTIONS

Eucradinae

Anhedobia dulcis sp. nov.

(Pl. I - Fig. 1; Fig. 1)

Type material. Holotype (♀): China, W Henan, 20 km SE Luanchuan "tunnel", 33.7 N, 111.8 E, 1.vii.2001, J. Turna lgt., (PZPC).

Description. Female (holotype). Elongate-elliptical, transversally convex with flattened top of elytra, body length 4.3 mm, the greatest width 2.0 mm. Ratio elytra length : elytra width of 1.6. Brown, pubescence yellow-grey (in some places whitish). Antennae, palpi and legs slightly lighter.

Head flat, vaguely shining, finely and densely punctuate with a few small blunt tubercles, distance between them at least 5 times smaller than their diameter. On the lateral margins (between front and eyes) and insert of antennae with slight longitudinal edges; with dense

recumbent strong hairs inclined on edges anteriorly and between them to longitudinal central line. Eyes very large, globular, with long, sparse, erect hairs. Front 2.5 times wider than width of eye in dorsal view. Antennae consist of eleven antennomeres, without antennal club. The first antennomere robust, shortly longer than wide. From the 2nd to the 10th ones slightly serrated. The 2nd as long as wide, the 3rd slightly longer than wide, the other twice longer than wide. The 11th lengthily elliptic, 3.8 times longer than wide. All antennomeres with short, dense and recumbent pubescence and sparse semierect hairs. The last segment of labial palpi long and slim, as long as other segments together, on the apex slightly emarginate. The last segment of maxillary palpi triangular, on apex emarginate, too.

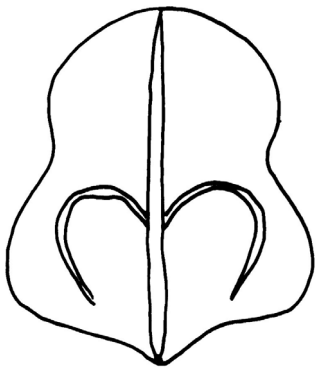


Fig. 1. *Anhedobia dulcis* sp. nov.: a – pronotum

Pronotum longitudinal, ratio length : width 1.2, widest shortly before base, shortly prolonged to scutellum on base and on apex of pronotum anteriorly, in the first third slightly strangulated. Middle of pronotum with high longitudinal keel from apex of pronotum to base of pronotum; in the second third with two slight edges inclined from this keel aslant anteriorly and in the centre between this keel and lateral margin of pronotum arcuately turned backwards (Fig. 1). Apex and base of pronotum bordered. Surface of pronotum vaguely shining, finely and densely punctuate with very sparse small blunt tubercles, distance between them at least 5 times smaller than their diameter. Pubescence almost recumbent, long, on apex and sides whitish and dense, on the base of pronotum yellowish and sparser, on the disc almost missing, also yellowish, regularly arranged, inclined partly backwards, partly to the middle of pronotum and partly forwards symmetric (left/right halves). Scutellum small, almost square, longitudinal keel-shaped.

Elytra shortly oval, with distinct shoulders, matt, densely and coarsely punctuate, punctures irregular, almost touching each other. Pubescence fine and dense, recumbent, inclined backwards, along suture whitish, on sides and apex yellowish. Each elytron shortly before apex on elytral declivity with very small spot from short, semierect, dense, black, brushish hairs.

Legs stout, with densely, lengthily semierect pubescence. Tarsi robust, as long as tibiae. The first tarsomere is the longest one, as long as 2nd and the 3rd together. The 3rd - 5th tarsomeres transverse, the 4th strongly heart-shapedly emarginate almost to base; in this emargination the 5th tarsomere is inserted. Claws long, without teeth.

Mesosternal process sharp and short. Metasternum with longitudinal shallow furrow; surface with two types of punctuation - the first fine and dense, punctures almost touch each other, the second sparser and coarse, separation between these punctures the same as their diameter. Pubescence long, dense, recumbent, inclined backwards. The 1st ventrite separated only by shallow furrow, in middle arcuate, other ventrites very strongly separated. The 2nd and 5th of the same length and slightly longer than 3rd and 4th, which are equal in length. Their surface with two types of punctures - the first fine and dense, almost touching each other, the

second sparser and coarse, distance between them the same as their diameter. Pubescence long, dense, inclined backwards.

Male. Unknown.

Differential diagnosis. The species differs from *Anhedobia capucina* (Reitter, 1877) by the absence of brushish clump of semierect, robust, black hairs; these hairs are distributed regularly on surface of elytra, more distinctly in the second half of elytra; only on elytral declivity before apex of each elytron, there is a small black brushish clump of robust short hairs.

Name derivation. Derived from Latin word "dulcis". It means interesting.

***Ptinomorphus knizeki* sp. nov.**

(Pl. I - Fig. 2; Figs 2a-b)

Type material. Holotype (♂): China, Quinghai, Tongren env., MaiXiu, 19.v.2007, M. Knížek lgt., (PZPC).

Description. Male (holotype). Elongate-elliptical, transversally convex with flattened top of elytra, body length 3.8 mm, the greatest width 1.6 mm. Ratio elytra length : elytra width of 1.9. Brown, pubescence grey-white. Antennae, palpi and legs slightly lighter.

Head evenly convex, shining, with two types of punctuation - the first type very fine and dense, the second sparse and coarse, diameter of punctures at least twice smaller than distance between punctures. Surface of head densely, lengthily recumbent pubescence, inclined more/less forwards. Eyes large, globular, with short, sparse, erect hairs. Front 5 times wider than width of eye in dorsal view. Antennae consist of eleven antennomeres, without antennal club. The 1st antennomere robust, twice longer than wide. The 2nd - 5th 1.4 times longer than wide, the 6th - 7th twice longer than wide, 8th - 10th 2.2 times longer than wide, the 11th the longest, 3.5 times longer than wide. All antennomeres with sparse semierect hairs. The last segment of maxillary palpi slightly clubbed, slightly longer than wide.

Pronotum slightly transverse, ratio length : width 0.85, the widest shortly before base, in the first third slightly strangulated. Middle of pronotum with longitudinal keel extending from base of pronotum, almost to half of pronotum; where arcuately inclined to margins of pronotum (Fig. 2b). Surface of pronotum shining, with sparse and coarse punctures, their diameter twice smaller than distance between

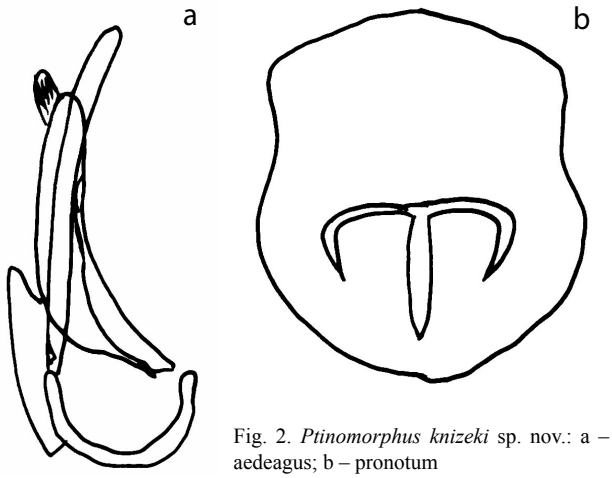


Fig. 2. *Ptinomorphus knizeki* sp. nov.: a – aedeagus; b – pronotum

them. Pubescence recumbent, long and fine, regularly arranged, inclined partly backwards, partly forwards.

Scutellum small, almost square, slightly elevated.

Elytra shortly oval, with distinct shoulders, vaguely shining, with two types of punctuation - the first type very fine and dense, the second sparse and coarse, diameter of punctures equal to distance between them. Pubescence fine, long and dense, recumbent, inclined backwards.

Legs stout, with dense, long, recumbent or partly semierect pubescence. Tarsi robust, 1.2 times longer than tibiae. The 1st tarsomere longest, 3.5 times longer than wide, the 2nd 0.7 times shorter than the 1st, other short and slightly transverse. Claws long, without teeth.

Metasternum with longitudinal shallow furrow; surface shining, sparsely and coarsely punctuate, distance between them 2-3 times longer then their diameter. Pubescence long, sparse, recumbent, inclined backwards. All ventrites separated in the same way, roughly of equal length, their surface shining, sparsely and coarsely punctuate, distance between them 2-3 times as their diameter. Pubescence long, sparse, recumbent, inclined backwards.

Aedeagus as in Fig. 2a.

Female. Unknown.

Differential diagnosis. The species differs from other species by the absence of erect hairs on elytra. From *P. regalis* (Duftschmid, 1825), which also has no erect hairs, it differs by the absence of costae on elytra, longer elytra and missing pattern of the pubescence arrangement on elytra.

Host plant. *Picea crassifolia* Komarov.

Name derivation. Dedicated to the collector of the holotype and my friend Miloš Knížek, world well-know specialist in Curculionidae, subfamily Scolytinae and Platypodinae.

Ptinomorphus tryznai **sp. nov.**

(Pl. I - Fig. 3; Figs 3a-b)

Type material. Holotype (♂): China, Shaanxi, Qing Ling Shan Mts., road Baoji - Taibai vill., pass 35 km S of Baoji, 21.-23.vi.1998, O. Šafránek & M. Trýzna lgt., (PZPC).

Description. Male (holotype). Elongate-elliptical, transversally convex with flattened top of elytra, body length 3.8 mm, the greatest width 1.6 mm. Ratio elytra length : elytra width of 1.7. Dark brown, pubescence of body double - brown and white. Antennae, palpi and legs lighter, brown.

Head flat, vaguely shining, with two types of punctuation - the first type very fine and dense, the second dense and coarse, distance between punctures smaller than their diameter. Surface of head with dense, long, recumbent pubescence, inclined forwards, yellowish. Eyes globular, with very short, sparse, erect hairs. Front 6.2 times wider than width of eye in dorsal view. Antennae consist of eleven antennomeres, without antennal club. The 1st antennomere robust, twice longer than wide. The 2nd as long as wide, shorter than the 1st and the slightly shorter than the 3rd. The 3rd shortly longer than the 2nd. The 3rd - 5th twice longer than wide, the 6th - 7th 2.2 times longer than wide; the 8th - 10th twice longer than wide; the 11th the longest,

4 times longer than wide. The 1st three antennomeres with dense semierect hairs, other antennomeres only with the same sporadic hairs. The last segment of maxillary palpi slightly clubbed, three times longer than wide.

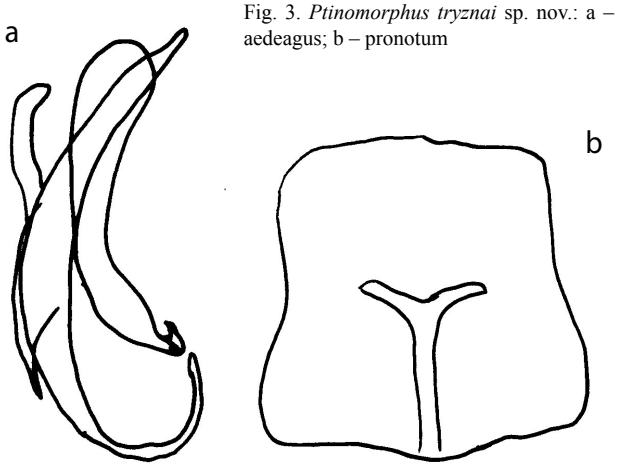


Fig. 3. *Ptinomorphus tryznai* sp. nov.: a – aedeagus; b – pronotum

Pronotum slightly transverse, ratio length : width 0.8, the widest in the half, behind apex slightly strangulated, before base slightly narrowed, shortly prolonged to scutellum. Middle of pronotum with longitudinal keel from base of pronotum, extend almost to half of pronotum; where arcuately inclined to margins of pronotum (Fig. 3b). Surface of pronotum vaguely shining, with very fine and dense punctures almost touching each other, with sparse small blunt tubercles, their diameter twice smaller than distance between them. Pubescence recumbent and long, regularly arranged, inclined mostly to centre of pronotum. Scutellum small, almost square.

Elytra shortly oval, with distinct shoulders, shining, with two types of punctuation - the first type very fine and dense, the second also dense but coarse, punctures very large and almost touching each other. Pubescence of two types - basic fine, long and sparse, recumbent, yellowish-brown, inclined backwards, the second white, strong, recumbent, inclined backwards, arranged in two transverse strips - the first oblique, from shoulders to suture, the second before apex of elytra. Shoulders and slim strip along suture between these two transverse strips with the same pubescence. Each elytron with 4-5 indistinct rows of erect, long, black, sparse, individual hairs (good distinct from lateral view).

Legs stout, with dense, long, recumbent or partly semierect pubescence. Tarsi robust, as long as tibia. The 1st tarsomere longest, 2.5 times longer than wide, the 2nd 1.2 times longer than wide, the 3rd as long as wide, 4th transverse, twice wider than long, slightly heart-shapedly emarginate on the one half; in this emargination 5th tarsomere is inserted, which is strongly clubbed, slightly longer than wide. Claws long, without teeth.

Metasternum transversally convex, with shallow longitudinal depression; piceous, surface shining, sparsely and coarsely punctuate, distance between punctures 2-3 times longer than their diameter. Pubescence long, sparse, recumbent, inclined backwards. The 1st and 2nd ventrites shortly longer than 3rd and 4th, the 5th longest (shortly longer than 1st or 2nd). All ventrites separated in the same way, their surface vaguely shining, with two types of punctuation - the first fine and dense, punctures almost touching each other, the second sparser and coarse, distance between these punctures as long as their diameter. Pubescence long, sparse, recumbent, inclined backwards.

Aedeagus see Fig 3a.

Female. Unknown.

Differential diagnosis. The species is closest to *P. imperialis* (Linnaeus, 1767) and differs from it by a smaller number of rows of erect individual hairs (also from other species in this genus with rows of erect individual hairs), arrangement of pubescence on elytra and shape of aedeagus.

Name derivation. Dedicated to one of two collectors of the holotype and my friend Miloš Trýzna, world well-know specialist in Anthribidae.

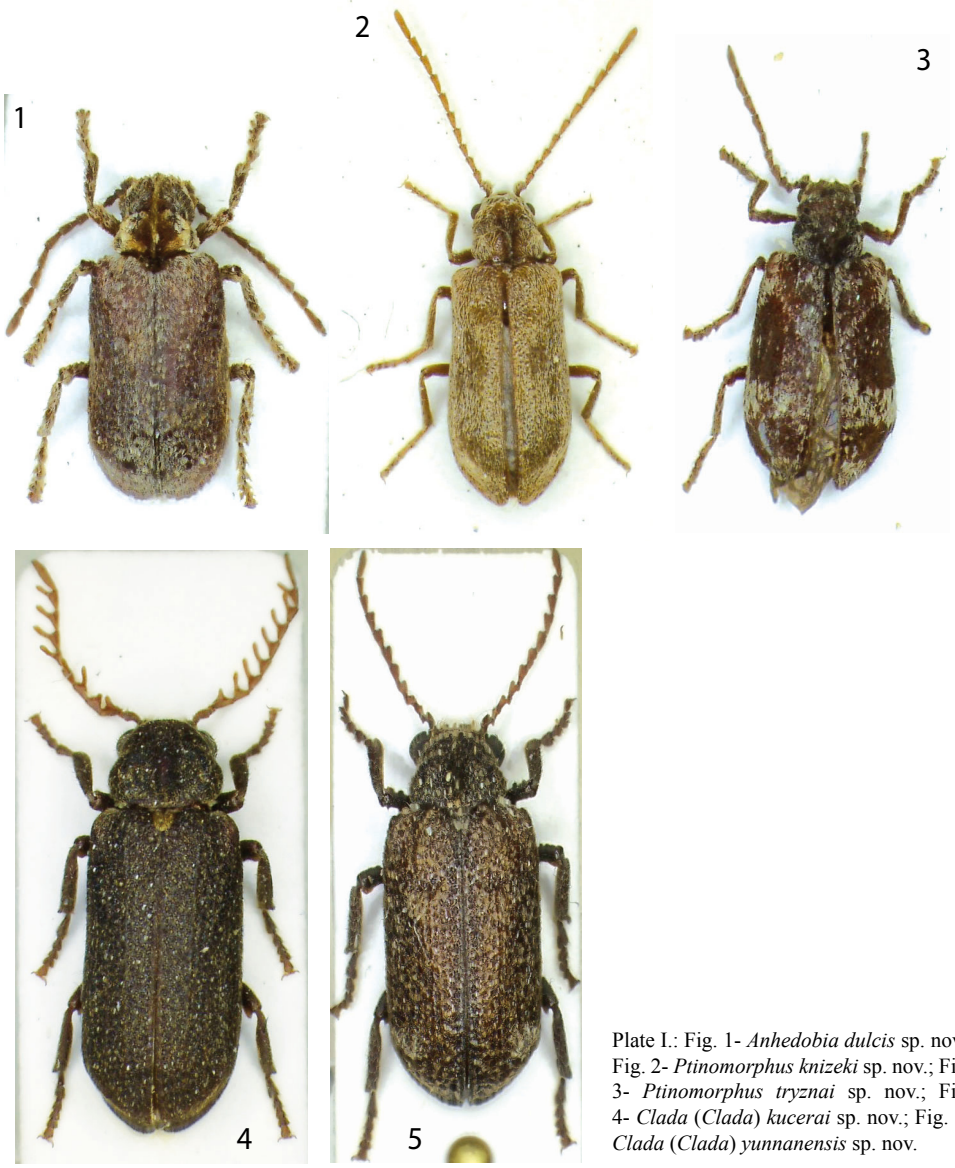


Plate I.: Fig. 1- *Anhedobia dulcis* sp. nov.; Fig. 2- *Ptinomorphus knizeki* sp. nov.; Fig. 3- *Ptinomorphus tryznai* sp. nov.; Fig. 4- *Clada* (*Clada*) *kucerai* sp. nov.; Fig. 5- *Clada* (*Clada*) *yunnanensis* sp. nov.

Clada (*Clada*) *kucerai* sp. nov.

(Pl. I - Fig. 4; Figs 4a-b)

Type material. Holotype (♂): China, Shaanxi, Lueyang, 29.v.-2.6.2005, E. Kučera lgt., (PZPC).

Description. Male (holotype). Elongate-elliptical, transversally convex, body length 7.8 mm, the greatest width 2.8 mm. Ratio elytra length : elytra width of 2.0. Piceous, pubescence yellowish-grey, short, sparse, recumbent. Antennae and palpi brown.

Head vertex evenly transversally slightly convex, front slightly concave, vaguely shining, very finely and densely punctuate, punctures almost touching each other, with small dense blunt tubercles, dense, distance between them smaller than their diameter. Surface of head with dense, long, recumbent or semierect (especially on sides of head) pubescence, inclined forwards, yellowish. Eyes large, globular, with long, sparse, erect hairs. Front 3 times wider than width of eye in dorsal view. Antennae consisting of eleven antennomeres, without antennal club, from the 3rd to 10th pectinated. The 1st antennomere robust, twice longer than wide. The 2nd only slightly longer than wide, 2.5 times shorter than the 1st. The 3rd slightly pectinated, as long as as wide. The 4th to 10th antennomeres approximately 1.7 times wider than long. The 11th elongate and slim, 4 times longer than wide (Fig. 4b). The last segment of maxillary palpi slightly clubbed, three times longer than wide.

Pronotum slightly transverse, ratio length : width 0.85, the widest at three fifths of length from apex of pronotum. Middle of pronotum with rounded bump at base, with shallow depressions between this bump and sides of pronotum. Surface of pronotum matt, very finely and densely punctate, with small dense blunt tubercles, their diameter being as long as distance between them. Pubescence short, sparse and recumbent, inclined backwards. Scutellum large, 1.1 times longer than wide, on apex rounded, with densely lengthily, yellowish, recumbent pubescence.

Elytra lengthily oval, with distinct shoulders, vaguely shining, with two types of punctuation - the first type very fine and dense, the second also dense but coarse, umbilicate, distance between punctures as long as their diameter. Pubescence fine, short and sparse, recumbent, inclined backwards.

Legs stout, with dense, long, recumbent or semierect pubescence. Tarsi robust, slightly longer than tibiae. The 1st tarsomere longest, 1.5 times longer than wide, the 2nd 1.3 times longer than wide, the 3rd as long as wide, the 4th transverse, 1.8 times wider than long, slightly heart-shapedly emarginate in one half; in this emargination 5th tarsomere is inserted, which is strongly clubbed, slightly longer than wide. Claws robust, long, without teeth.

Mesosternum with shallow depression for coxae, with long and very sharp and thin

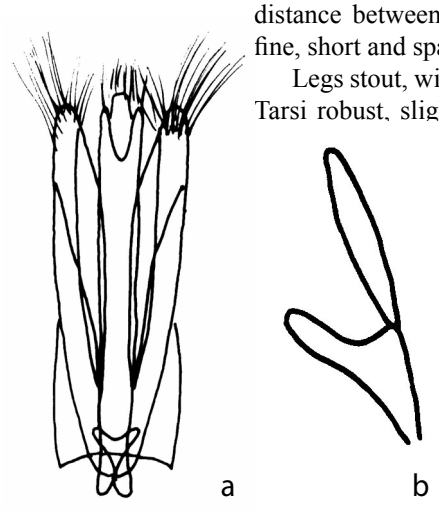


Fig. 4. *Clada* (*Clada*) *kucerai* sp. nov.: a – aedeagus; b – the last two antennomeres

mesosternal process. Metasternum with mesocoxae separated by short and wide process. Disc of metasternum flattened, more shining and almost glabrous. Other surface with two types of punctuation - the first fine and dense, punctures almost touching each other, the second sparse, coarse, umbilicate, their diameter as long as distance between them. Pubescence sparse, fine, long, recumbent, inclined backwards. Ventrites vaguely shining, finely and densely punctuate, punctures almost touching each other, with small sparse blunt tubercles, distance between them 2-3 times longer than their diameter. Pubescence short, recumbent, inclined backwards; on border of ventrites longer and denser.

Aedeagus see Fig. 4a.

Female. Unknown.

Differential diagnosis. This species is very similar to *C*. (*C*.) *maxima* (Pic, 1903) from China and *C*. (*C*.) *latithorax* (Pic, 1909) from Laos and differs from them by punctuation on elytra, which is more regular; from *C*. (*C*.) *yunnanensis* sp. nov. it differs by missing keel on pronotum, from *C*. (*C*.) *zdeneki* sp. nov. and *C*. (*C*.) *monikae* sp. nov. by the shape of bump on the pronotum, and from *C*. (*C*.) *borowski* sp. nov. and *C*. (*C*.) *parva* sp. nov. by the body colour. From other Chinese species, *C*. (*C*.) *insulcata* Pic, 1933, differs by missing costae on elytra.

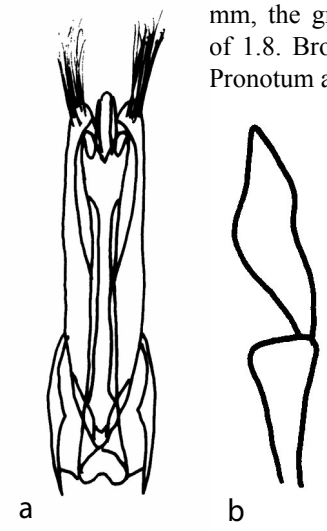
Name derivation. Dedicated to the collector of the holotype Emil Kučera (Czech Republic).

Clada (*Clada*) *yunnanensis* sp. nov.

(Pl. I - Fig. 5; Figs 5a-b)

Type material. Holotype (♂): China, Yunnan, Huba Shan, 1.-6.vii.2005, E. Kučera lgt., (PZPC).

Description. Male (holotype). Elongate-elliptical, transversally convex, body length 9.1 mm, the greatest width 4.2 mm. Ratio elytra length : to elytra width of 1.8. Brown, pubescence yellowish-brown, short, dense, recumbent. Pronotum and legs piceous. Antennae and palpi light brown.



Head vertex slightly evenly transversally convex, with small bump in the middle, front slightly concave, matt, very finely and densely punctuate, punctures almost touching each other, with small dense blunt tubercles, distance between them smaller than their diameter. Surface of head with yellowish, dense, long, erect or semierect hairs, pubescence inclined forwards. Eyes large, globular, with long, dense, erect hairs. Front 2.2 times wider than width of eye in dorsal view. Antennae consist of eleven antennomeres, without antennal club, from the 3rd to 10th

Fig. 5. *Clada* (*Clada*) *yunnanensis* sp. nov.: a – aedeagus; b – the last two antennomeres

slightly serrated. The 1st antennomere robust, 2.2 times longer than wide. The 2nd 0.8 times longer than wide, 2.1 times shorter than the 1st. The 3rd slightly serrated, twice longer than wide. The 4th 1.4 times longer than wide, 5th - 10th 1.6 times longer than wide. The 11th elongate, with sharp apex, 2.5 times longer than wide (Fig. 5b). The last segment of maxillary palpi slightly clubbed, three times longer than wide.

Pronotum slightly transverse, ratio length : width 0.8, the widest at middle of pronotum. Middle of pronotum at base with rounded keel-shaped bump, extending as low keel to apex of pronotum; between this bump and sides of pronotum with shallow depressions. Surface of pronotum vaguely shining, very finely and densely punctuate, with very dense blunt tubercles, diameter of punctures as long as distance between them, punctures from time to time almost touching each other. Pubescence short, sparse and recumbent or semierect, inclined partly backwards, partly forwards and on lateral margin to sides. Scutellum large, 1.1 times longer than wide, on apex rounded, dense, fine, long, whitish, recumbent pubescence.

Elytra oblong oval, with distinct shoulders, vaguely shining, surface irregularly uneven, with two types of punctuations - the first type very fine and dense, the second also dense, but very coarse, punctures umbilicate, distance between them minimal, large punctures almost touching each other. Pubescence fine, short and sparse, recumbent or semierect, inclined backwards.

Legs stout, with dense, long, recumbent or semierect pubescence with sparse erect hairs. Tarsi robust, slightly longer than tibiae. The 1st tarsomere longest, 1.5 times longer than wide, the 2nd 1.3 times longer than wide, the 3rd as long as wide, the 4th transverse, 1.8 wider than long, slightly heart-shapedly emarginate on the one half; 5th tarsomere is inserted in this emargination, which is strongly clubbed, slightly longer than wide. Claws robust, long, without teeth.

Mesosternum with shallow depression for coxae, with long and very sharp and thin mesosternal process. Metasternum separating mesocoxae by short and wide process. Disc of metasternum shallowly depressed, more shining and almost glabrous. Other surface with two types of punctuation - the first punctures fine and dense, almost touching each other, the second sparse ones coarse, umbilicate, their diameter as long as distance between them. Pubescence sparse, very fine, long, recumbent, irregularly arranged. Ventrites shinning, with two types of punctuation - the first punctures fine and dense, punctures almost touch each other, the second ones coarse and denser, umbilicate, distance between them as long as their diameter. Pubescence long, recumbent, inclined backwards.

Aedeagus see Fig. 5a.

Female. Unknown.

Differential diagnosis. The species differs from other species of the genus by the presence of the longitudinal keel on the pronotum.

Name derivation. Derived from name of the province of China, place of its distribution.

***Clada* (*Clada*) *monikae* sp. nov.**
(Pl. II - Fig. 6; Figs 6a-b)

Type material. Holotype (♂): China, Yunnan, Haba Shan, 1.-6.vii.2005, E. Kučera lgt., (PZPC). Paratype (♂): China, , Lijiang, 26°49' N, 100°49' E, 7.-9.vi.1998, E. Kučera lgt., (PZPC).

Description. Male (holotype). Elongate-elliptical, transversally convex, body length 8.9 mm, the greatest width 3.1 mm. Ratio elytra length : elytra width of 1.9. Dark brown, pubescence yellowish-brown, short, dense, recumbent. Antennae and palpi light brown.

Vertex evenly transversally slightly convex with small bump in middle, front slightly concave, matt, very finely and densely punctuate, with very dense blunt tubercles, distance between punctures smaller than their diameter. Surface of head yellowish, dense, with long, erect or semierect hairs, pubescence inclined forwards. Eyes large, globular, with long, dense, erect hairs. Front twice wider than width of eye in dorsal view. Antennae consisting of eleven antennomeres, without antennal club, from 3rd to 10th slightly serrated. The 1st antennomere robust, 1.9 times longer than wide. The 2nd 0.9 times longer than wide, 1.7 times shorter than the 1st. The 3rd slightly serrated, 2.7 times longer than wide. The 4th twice longer than wide, 5th - 10th 2.5 times longer than wide. The 11th elongate with angular apex, 3.6 times longer than wide (Fig. 6b). The last segment of maxillary palpi slightly clubbed, three times longer than wide.

Pronotum slightly transverse, ratio length : width 0.8, almost rectangular, lateral margin parallel. Middle of pronotum at base with rounded keel-shaped bump; between this bump and sides of pronotum with shallow depressions. Surface of pronotum vaguely shining, very finely and densely punctuate, with very dense blunt tubercles, diameter of punctures as long as distance between them, some punctures almost touching each other. Pubescence short, sparse and semierect, inclined partly backwards, partly forwards. Scutellum large, 1.9 longer than wide, rectangular, on apex rounded, dense, fine, long, whitish, recumbent pubescence.

Elytra lengthily oval, with distinct shoulders, vaguely shining, surface irregularly uneven, with two types of punctuation - the first type punctures very fine and dense, the second type ones also dense and very coarse, umbilicate, distance between them minimal, large punctures almost touching each other. Pubescence fine, short and sparse, recumbent, inclined backwards, arranged cloudily, especially along suture. Each elytron with few very fine, long, erect hairs on anterior half.

Legs stout, densely, with lengthily recumbent or semierect pubescence and sparse erect hairs. Tarsi robust, slightly longer than tibiae. The 1st tarsomere longest, 1.5 times longer than wide, the 2nd 1.3 times

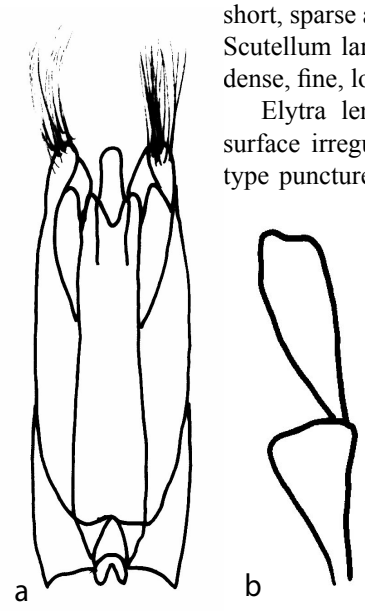


Fig. 6. *Clada* (*Clada*) *monikae* sp. nov.: a – aedeagus; b – the last two antennomeres

longer than wide, the 3rd as long as wide, the 4th transverse, 1.8 times wider than long, slightly heart-shapedly emarginate on the one half; in this emargination, 5th tarsomere is inserted, which is strongly clubbed, shortly longer than wide. Claws robust, long, without teeth.

Mesosternum with shallow depression for coxae with short and sharp mesosternal process. Metasternum separating mesocoxae by short and wide process. Disc of metasternum shallowly depressed, with indistinct longitudinal furrow, more shining. with only very sparse hairs. Other surface shinning, with two types of punctuation - the first type punctures fine and dense, almost touch each other, the second ones sparse, coarse, umbilicate, their diameter as long as distance between them. Pubescence sparse, very fine, long, recumbent, inclined backwards. Ventrites vaguely shining, with two types of punctuation - the first punctures fine and dense, punctures almost touching each other, the second ones coarse and denser, umbilicate, distance between them as long as their diameter. Pubescence long, recumbent, inclined backwards.

Aedeagus see Fig. 6a.

Female. Unknown.

Variability. Body length 7.9 - 8.9 mm; the greatest width 2.8 - 3.1 mm. Pronotum darker, almost piceous.

Female. Unknown.

Differential diagnosis. The species is very similar to *C*. (*C*.) *maxima* (Pic, 1903) and *C*. (*C*.). *latithorax* (Pic, 1909) because of irregular surface of elytra (other species have regular punctuation on elytra); from *C*. (*C*.) *maxima* (Pic, 1903) differs by missing spots on elytra, and from *C*. (*C*.). *latithorax* (Pic, 1909) by more distinct and sharp bump on pronotum and sparser pubescence on elytra.

Name derivation. Dedicated to my friend Monika Bouškova, who helps me with photographs of beetles for publications.

Clada (*Clada*) *zdeneki* sp. nov.

(Pl. II - Fig. 7; Figs 7a-b)

Type material. Holotype (♂): China, Yunnan, Sabe, 10.-11.vii.2005, E. Kučera lgt., (PZPC).

Description. Male (holotype). Elongate-elliptical, transversally convex, body length 9.9 mm, the greatest width 3.5 mm. Ratio length : width of elytra 1.9. Dark brown, pubescence whitish-yellow, short, dense, semierect. Pronotum darker, almost piceous. Antennae and palpi brown.

Vertex evenly transversally slightly convex, front flat, matt, finely and densely punctate, with dense small blunt tubercles, distance between them as long as their diameter. Surface of head with whitish-grey, dense, long, erect or semierect hairs, pubescence inclined forwards. Eyes large, globular, with short, dense, erect hairs. Front 2.5 times wider than width of eye in dorsal view. Antennae consisting of eleven antennomeres, without antennal club, from the 3rd to 10th very slightly serrated. The 1st antennomere long and relatively slim, 3 times longer than wide. The 2nd 1.5 times longer than wide, twice shorter than the 1st. The 3rd very slightly

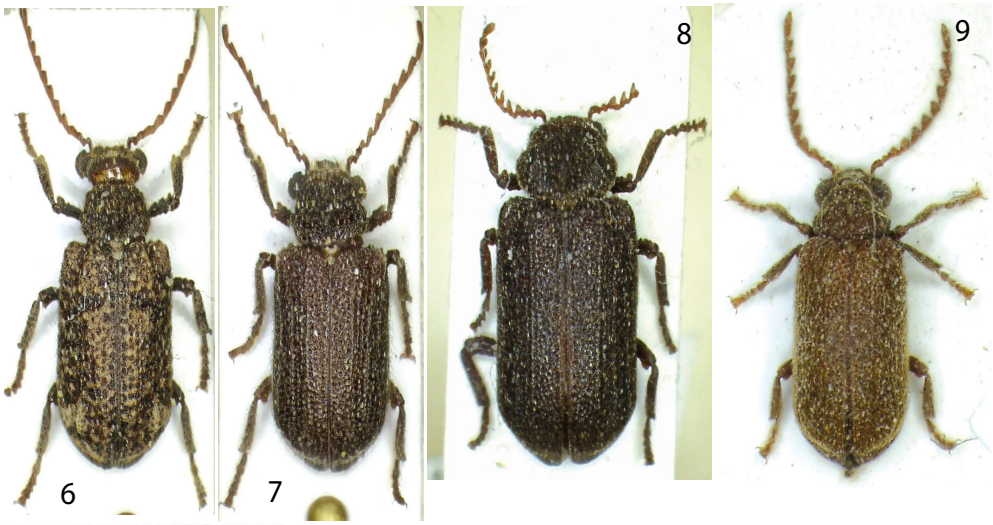


Plate II.: Fig. 6- *Clada* (*Clada*) *monikae* sp. nov.; Fig. 7- *Clada* (*Clada*) *zdeneki* sp. nov.; Fig. 8- *Clada* (*Clada*) *borowskii* sp. nov.; Fig. 9- *Clada* (*Clada*) *parva* sp. nov.; Fig. 10- *Ernobius sakai* sp. nov.

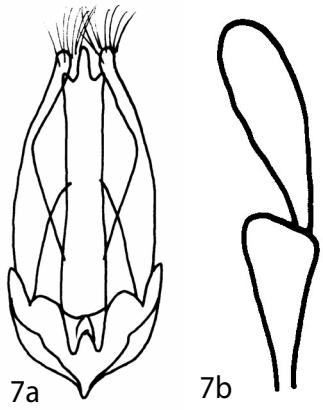


Fig. 7. *Clada* (*Clada*) *zdeneki* sp. nov.: a – aedeagus; b – the last two antennomeres

serrated, twice longer than wide. The 4th twice longer than wide, 5th - 10th 1.9 times longer than wide. The 11th elongate with angular apex, 3.1 times longer than wide (Fig. 7b). The last segment of maxillary palpi slightly clubbed, three times longer than wide.

Pronotum almost square, ratio length : width 1.0. Middle of pronotum with small rounded bumps; between these bumps and sides of pronotum with shallow depressions. Surface of pronotum vaguely shining, finely and very densely punctuate, with dense blunt tubercles, distance between them very small, almost touching each other. Pubescence long, dense and semierect or erect, inclined partly backwards, partly forwards. Scutellum large, as long as wide, triangular, on apex slightly rounded, dense, fine, long, whitish, recumbent pubescence.

Elytra lengthily oval, with distinct shoulders, shining, surface irregularly uneven, with dense and very coarse, umbilicate punctures, distance between punctures minimal, large

punctures almost touching each other. Pubescence short and dense, semierect, inclined backwards.

Legs stout, with dense, long, erect pubescence. Tarsi robust, slightly longer than tibiae. The 1st tarsomere longest, 1.4 times longer than wide, the 2nd 1.2 times longer than wide, the 3rd as long as wide, 4th transverse, 1.7 wider than long, slightly heart-shapedly emarginate in one half; in this emargination, 5th tarsomere is inserted, which is strongly clubbed, slightly longer than wide. Claws robust, long, without teeth.

Mesosternum with shallow depression for coxae, with long and sharp and thin mesosternal process. Metasternum separating mesocoxae by short and wide process. Disc of metasternum shallowly depressed, in middle with longitudinal keel, more shining and almost glabrous. Other surface with two types of punctures - the first punctures fine and dense, almost invisible, distance between them minimally twice longer than their diameter, the second ones sparse, coarse, umbilicate, their diameter as long as distance between them. Pubescence sparse, fine, short, recumbent, inclined backwards. Ventrites shining, with two types of punctuation - the first punctures fine and dense, almost invisible, distance between them minimally twice longer than their diameter, the second ones sparse, coarse, umbilicate, their diameter as long as distance between them. Pubescence sparse, fine, longer, recumbent, inclined backwards.

Aedeagus see Fig. 7a.

Female. Unknown.

Differential diagnosis. The species differs from the most similar species *C*. (*C*.) *insulcata* Pic, 1933 by its not very distinct costae on elytra, other species from this region have no costae on the elytra.

Name derivation. Dedicated to my friend Zdeněk Říha.

Clada (*Clada*) *borowskii* sp. nov.

(Pl. II - Fig. 8; Fig. 8)

Type material. Holotype (♀): China, Taiwan, Heshe, Nantou County, 2.-17.vi.2008, J. Borowski lgt., (PZPC).

Description. Female (holotype). Elongate-elliptical, transversally convex, body length 9.1 mm, the greatest width 3.6 mm. Ratio elytra length : elytra width of 1.9. Piceous, pubescence whitish-yellow, short, spare or dense, only slightly semierect, almost recumbent. Antennae, palpi and last three tarsomeres brown.

Vertex flat, front evenly concave, vaguely shining, finely and densely punctuate, these punctures almost touching each other, with blunt tubercles, distance between tubercles is one half their diameter. Surface of head with whitish-yellow, sparse, long, erect or semierect hairs, pubescence inclined forwards. Eyes large, globular, with short, dense, erect, black hairs. Front 2.3 times wider than width of eye in dorsal view. Antennae consisting of eleven antennomeres, without antennal club, from the 3rd to 10th serrated. The 1st antennomere long and relatively slim, 2.3 times longer than wide. The 2nd

Fig. 8. *Clada* (*Clada*) *borowskii* sp. nov.: the last two antennomeres

almost rounded, 3 times shorter than the 1st. The 3rd very serrated, 1.1 longer than wide; the 4th to 7th as long as wide; the 8th to 10th 1.1 longer than wide. The 11th elongate, 2.3 times longer than wide (Fig. 8). The last segment of maxillary palpi slightly clubbed, twice longer than wide.

Pronotum transverse, ratio length : width 0.75. Middle of pronotum with rounded bump; between this bump and sides of pronotum with shallow depressions. Apex of pronotum slightly separated by transversal shallow depression. Posterior angels rounded, lateral margin invisible. Surface of pronotum vaguely shining, finely and densely punctuate, punctures almost touching each other, with blunt tubercles, distance between tubercles is one half their diameter. Pubescence long, sparse and semierect, inclined partly backwards, partly forwards. Scutellum large, 1.3 longer than wide, triangular, on apex slightly rounded, with sparsely finely, lengthily, whitish-yellow, recumbent pubescence.

Elytra lengthily oval, with distinct shoulders, vaguely shining, surface irregularly uneven, with dense and very coarse, umbilicate punctures, distance between punctures one half their diameter, punctures partly almost touching each other. Each elytron with five costae, which are more distinct on apex of elytra. Pubescence short and sparse, recumbent or semierect, inclined backwards.

Legs stout, with densely, lengthily semierect, partly erect pubescence. Tarsi robust, slightly shorter as tibiae. The 1st tarsomere longest, 1.9 times longer than wide; the 2nd 1.1 times longer than wide and 1.9 times shorter than the 1st; the 3rd and the 4th transverse, 1.9 wider than long, slightly heart-shapedly emarginated; the 5th tarsomere as long as wide, strongly clubbed. Claws robust, long, without teeth.

Mesosternum with shallow depression for coxae, with short mesosternal process. Metasternum separating mesocoxae by short and wide process. Disc of metasternum shallowly depressed, in middle with longitudinal keel. Surface of metasternum fine and dense punctuated, punctures almost touch each other, with small dense blunt tubercles, their diameter as long as distance between them. Pubescence sparse, fine, short, recumbent, inclined backwards. Ventrites shinning, with two types of punctuation – first punctures, fine and dense, almost invisible, distance between them at least twice longer than their diameter, the second ones sparse, coarse, umbilicate, their diameter as long as distance between them. Pubescence sparse, fine, longer, recumbent, inclined backwards.

Male. Unknown.

Differential diagnosis. The species differs from all other species by its almost black colour of body and width of elytra (the ratio elytra length : elytra width is different compared to other species). The pubescence is also different from that in other species.

Name derivation. Dedicated to the collector of the type material and my friend Jerzy Borowski, well-know world specialist in Bostrichidae and Ptinidae (Ptininae and Gibbiinae).

***Clada* (*Clada*) *parva* sp. nov.**
(Pl. II - Fig. 9; Figs 9a-b)

Type material. Holotype (♂): China, Taiwan, Shanping area, Kaoschung County, 23.-26.vi.2008, J. Borowski lgt., (PZPC).

Description. Male (holotype). Elongate-elliptical, transversally convex, body length 4.2 mm, the greatest width 1.7 mm. Ratio length : width of elytra 2.0. Light brown, pubescence white, long, dense, semierect. Antennae, palpi and tarsi lighter.

Vertex evenly transversally slightly convex, front flat, vaguely shining, finely and densely punctuate, with blunt tubercles, distance between them is one half their diameter. Surface of head with densely, lengthily, semierect hairs, pubescence inclined forwards, partly obliquely to longitudinal line. Eyes large, globular, with long, dense, erect hairs. Front 1.8 times wider than width of eye in dorsal view. Antennae consisting of eleven antennomeres, without antennal club, from the 3rd to 10th serrated. The 1st antennomere long and relatively slim, 3 times longer than wide. The 2nd almost rounded, the same length as wide, 2.8 shorter than the 1st. The 3rd slightly serrate, 1.3 times longer than wide. The 4th 1.1 times longer than wide, the 5th to 7th 1.2 times longer than wide; the 8th to 10th 1.4 times longer than wide. The 11th elongate with slightly pointed apex, 2.7 times longer as wide (Fig. 9b). The last segment of maxillary palpi slightly clubbed, three times longer than wide.

Pronotum slightly transverse, ratio length : width 0.6, the widest at midlength. Middle of pronotum with small rounded bump; between this bump and sides of pronotum with shallow depressions. Surface of pronotum vaguely shining,, with umbilicate, dense and coarse punctures, distance between punctures one half their diameter. Pubescence long, dense and semierect or erect, inclined partly backwards, partly forwards and partly to centre of pronotum, to top of bump. Scutellum large, slightly elevated, as long as wide, triangular, on apex slightly rounded, with densely, finely, lengthily, recumbent pubescence.

Elytra lengthily oval, transversally strongly convex, with distinct shoulders, shining, surface with dense and coarse, umbilicate punctures, distance between punctures equal to one half their diameter. Pubescence long and dense, semierect, inclined backwards.

Legs stout, with sparsely, lengthily semierect pubescence. Tarsi robust, slightly longer as tibiae. The 1st tarsomere longest, 1.8 times longer than wide, the 2nd 1.5 times longer than wide, the 3rd as long as wide, the 4th transverse, 1.7 wider than long, slightly heart-shapedly emargination in one half; robust 5th tarsomere is inserted in this emargination, which is strongly clubbed, almost triangular, with shallow emargination on apex, 1.3 times longer than wide. Claws long and very robust, without teeth.

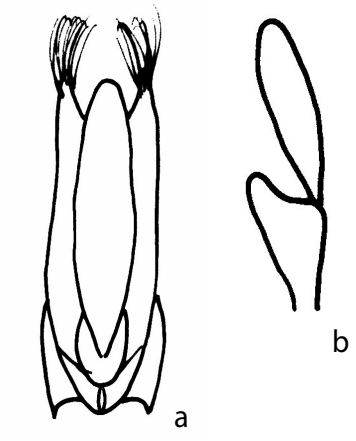


Fig. 9. *Clada* (*Clada*) *parva* sp. nov.: a – aedeagus; b – the last two antennomeres

Mesosternum with shallow depression for coxae, with long and sharp mesosternal process. Metasternum separating mesocoxae by short and wide process. Disc of metasternum posteriorly with shallow depression, surface of metasternum shining, sparsely and coarsely punctuate, puncture diameter twice longer than distance between punctures. Pubescence sparse, very fine, long, recumbent, inclined backwards. Ventrites vaguely shining, with two types of punctuation - first punctures fine and dense, almost touching each other, second ones coarse and denser, umbilicate, distance between them equal to their diameter. Pubescence very long, recumbent or semierect, inclined backwards.

Aedeagus see Fig. 9a.

Female. Unknown.

Differential diagnosis. The species differs from all other species by its smaller body and different colour.

Name derivation. Derived from Latin word "parvus". It means small.

Clada (*Clada*) *maxima* (Pic, 1903)

Material examined. China, Yunnan, Kunming, 2.vii.1990, 13 spec., V. Kubáň lgt., (NHMBS, PZPC); China, Yunnan, Litiang, 10.-15.vi.1994, 1 spec., E. Kučera lgt., (PZPC).

Distribution. China : Yunnan.

Clada (*Clada*) *insulcata* Pic, 1933

Material examined. China, Yunnan, Dali, 19.-21.v.1993, 1 spec., R. Červenka lgt., (PZPC).

Distribution. China: Anhui, Gansu, Yunnan.

Ernobiinae

Ernobius sakai sp. nov.

(Pl. II - Fig. 10; Figs 10a-b)

Type material. Holotype (♂): China, Hubei, Dashennongjia Mts., 31.5° N, 110.3° E, 2100-2900, 10.-14.vi.2002, J. Turna lgt., (PZPC). Paratype (♀): China, Hebei, Shijiazhuang, Taihang Mts., Jingxing, Xinzhuang, 1000 m a.s.l., 13.-20.vii.2003, P. Zahradník lgt., (PZPC).

Description. Male (holotype). Shortly elongate-elliptical, transversally slightly convex, body length 2.6 mm, the greatest width 1.1 mm. Ratio elytra length : elytra width of 1.5. Light brown, head and last three antennomeres darker. Pubescence yellow. Antennae, palpi and legs yellow-brown.

Head transversally slightly convex, shining, with two types of punctures - the first ones very fine and dense, almost touching each other, the second ones coarse and also dense, distance between them punctures the same as their diameter. Eyes small, slightly convex,

without hairs. Front 3.7 times wider than width of eye in dorsal view. Antennae filiform, consisting of eleven antennomeres. The 1st antennomere robust, twice longer than wide, the 2nd slimmer and shorter than the 1st, twice longer than wide, half than the 1st. The 3rd 3 times longer than wide, the 4th twice longer than wide, the 5th 2.5 times longer than wide, the 6th and 7th 1.3 times longer than wide and 8th 1.1 times longer than wide. The 9th - 11th enlarged, the 9th and 10th 3 times longer than wide, widest on apex, the 11th 3.6 times longer than wide, lengthily elliptic, slightly pointed on apex (Fig. 10b). The 1st - the 8th antennomeres shining, the 9th - 11th matt, without pubescence. The last segment of maxillary palpi rectangular, on apex outside sharpened.

Pronotum transverse, ratio length : width 0.6, the widest in the first third, strongly arcuate to apex, slightly narrowed to base of pronotum. Sides of pronotum widely flattened. Anterior angles from dorsal view invisible, from lateral view slightly obtuse, posterior angle rounded. Surface of pronotum shinning, densely and coarsely umbilicate-punctuate, distance between punctures equal to or smaller than their diameter. Pubescence long, fine, recumbent, inclined backward, on the posterior angels obliquely backwards. Scutellum small, triangular, as long as wide.

Elytra shortly oval, without distinct shoulders, shinning, densely and coarsely punctuate; punctures almost touching each other. Pubescence fine and dense, recumbent or slightly semierect (especially on sides and apex of elytra), inclined backwards, arranged in small groups, triangular shape, in touch at the apex.

Legs thin and long, with sparse long semierect pubescence. Tibiae as long as tarsi. The 1st tarsomere as long as the 2nd to 4th together, of the same width. The 2nd tarsomere as long as the 3rd and the 4th together. The 4th deeply heart-shapedly emarginated, up to two thirds of long, in this emarginated is inserted the 5th tarsomere, which is lengthily oval, twice long as wide. Claws relatively large, without teeth. Disc of metasternum transversally convex, posteriorly with small rounded shallow depression, Surface shinning, densely and coarsely, umbilicate punctate, puncture diameter as long as distance between punctures. Pubescence sparse, fine, short, recumbent, inclined backwards. Ventrites shining, densely and coarsely, umbilicate-punctate, puncture diameter as long as distance between punctures. Pubescence sparse, fine, short, recumbent, inclined backwards.

Aedeagus see Fig. 10a.

Variability. Body length 3.0 mm, the greatest width 1.3 mm. The head and the last three antennomeres lighter.

Female. Without sexual dimorphism.

Differential diagnosis. The species is very similar to other species in the species-group

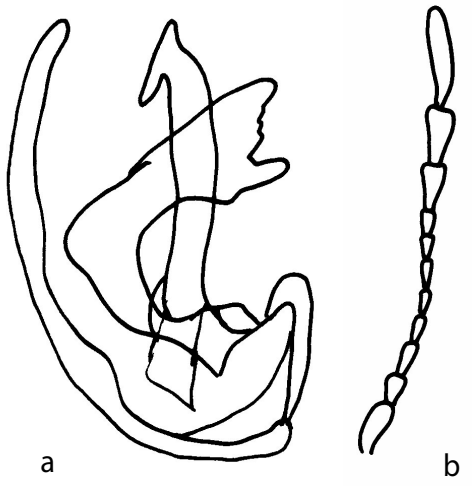


Fig. 10. *Ernobius sakai* sp. nov.: a – aedeagus; b – antennae

abietis, from which it especially differs by its small body and shape of aedeagus.

Host plant. *Pinus tabuliformis* Carrière.

Name derivation. Dedicated to Masahiro Sakai, the well-know world specialist in Ptinidae, especially from Japan and neighbouring countries.

Ptilininae

***Indanobium chinensis* sp. nov.**
(Pl. III - Fig. 11; Figs 11a-b)

Type material. Holotype (♀): China, Shaanxi, Lueyang, 15.-22.vii.2005, E. Kučera lgt., (PZPC). Paratypes (♀): the same data as holotype, (PZPC).

Description. Female (holotype). Lengthily elongate-elliptical, transversally convex, body length 4.9 mm, the greatest width 2.4 mm. Ratio length : width of elytra 1.5. Brown. Pubescence yellowish-white. Antennae, palpi and legs slightly lighter.

Head flat, only anterior part of front slightly transversally concave, clypeus separated from front by very distinct transversal furrow; matt, very finely and densely punctuate, punctures almost touching each other, with small, sparse, irregular small tubercles, distance between punctures at least 3 times longer than their diameter. Surface of head densely, very shortly (almost invisible), recumbent pubescence. Labrum with very densely recumbent pubescence and few long hairs, all inclined forwards. Eyes globular, without pubescence. Front 2.9 times wider than width of eye from dorsal view. Antennae consisting of eleven antennomeres, filiform, with antennal club comprising last 3 antennomeres. The 1st antennomere robust, twice longer than wide, the 2nd almost rounded, 1.1 times longer than wide, 2.8 shorter than the 1st antennomere. The 3rd 1.2 times longer than the 2nd, the 4th to 6th as long as wide, of the same length, 1.2 times wider as long, the 7th and the 8th similar, but smaller. The 9th and the 10th 1.8 times longer than wide, enlarged inwards, the widest in ¾ from base. The 11th elongate, 3.4 times longer than wide (Fig. 11b). The last segment of maxillary palpi spindle-shaped, 2.4 times longer than wide.

Pronotum slightly transverse, ratio length : width 0.9, the widest at the middle, anteriorly slightly narrowed (Fig. 11a). Margin of pronotum slightly bordered. Disc of pronotum flattened, posterior zone with small elevations on sides. Surface of pronotum finely and densely punctuate, with small blunt tubercles, distance between them 1-2 times larger than their diameter. Pubescence fine, short, recumbent, inclined mostly backward. Scutellum almost rectangular, 1.2 times wider than long.

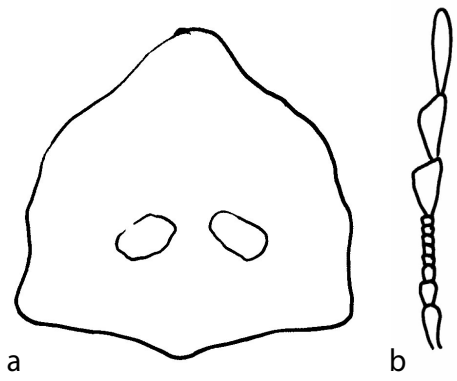


Fig. 11. *Indanobium chinensis* sp. nov.: a – pronotum; b – antennae

Elytra lengthily oval, transversally convex, without distinct shoulders, matt, without costae, surface with two types of punctuation - the first punctures very fine and dense, almost touching each other, the second ones sparse and coarse, arranged in slight, irregular, poorly visible striae, distance between punctures 1-2 times larger than their diameter. Pubescence short, fine, recumbent, inclined backwards.

Legs not robust, tibiae slightly shorter than tarsi. The 1st tarsomere longest, twice long than the 2nd, of the same length as other together. The 3rd as long as wide, the 4th slightly longer, slightly heart-shapedly emarginate in one half; in this emargination the 5th tarsomere is inserted, which is slightly longer than 3rd and 4th together, and twice longer than wide. Claws long and slim, without teeth.

Prosternal and mesothoracic process short, long and sharp. Metathoracic process large and sharp. Metasternum in posterior zone with wide longitudinal depression. Surface shining, densely and finely punctuate, diameter of punctures roughly same as distance between them. The 1st, the 2nd and the 5th ventrites shortly longer than the 3rd and the 4th ventrites (separately). Posterior border of the 1st ventrite curved in the middle. Their surface shining, sparsely and finely punctuate, distance between punctures roughly the same as their diameter. Ending of all ventrites with short, dense, recumbent, pubescence.

Male. Unknown.

Variability. Body length 4.1-4.9 mm, the greatest width 2.2-2.4 mm. Elytra light brown, almost yellow-brown, pronotum darker.

Differential diagnosis. The species differs from a similar species *I. tonkineus* (Pic, 1917) by smaller bumps on the pronotum, shape of antennae and shape of aedeagus.

Name derivation. Derived from the name of the China, country of its distribution.

***Ptilinus kejvali* sp. nov.**

(Pl. III - Fig. 12; Figs 12a-c)

Type material. Holotype (♀): China, Sichuan, Liziping Shimion, 200 km SW of Yaan, 27.vi.-2.vii.1991, Z. Kejval lgt.,, (PZPC). Paratypes: (3 ♀♀): the same data as holotype, (PZPC).

Description. Female (holotype). Lengthily elongate-elliptical, transversally strongly convex, almost cylindrical, body length 5.1 mm, the greatest width 2.0 mm. Ratio elytra length : elytra width of 1.5. Dark brown. Pubescence yellowish-white. Antennae, palpi and legs slightly lighter. Ventral part piceous.

Vertex transversally convex, with longitudinal fine edge. Front visibly separated by transversal curved fine edge, in middle slightly bent to vertex; almost flattened. Head matt, finely and densely umbilicate- punctuate, punctures almost touching each other. Surface of head with dense, short, recumbent pubescence inclined more or less forwards, with sparse, short, erect hairs on disc of front, denser on sides. Labrum with very dense semierect and long pubescence, surface of labrum almost invisible. Eyes small, only slightly convex, without pubescence. Front wide, more than 10 times as wide as eye from dorsal view. Antennae consisting of eleven antennomeres, without antennal club, from the 3rd to 10th

Plate III.: Fig. 11- *Indanobium chinensis* sp. nov.; Fig. 12- *Ptilinus kejvali* sp. nov.; Fig. 13- *Ptilinus gerakeorum* sp. nov.; Fig. 14- *Ptilinus similis* sp. nov.

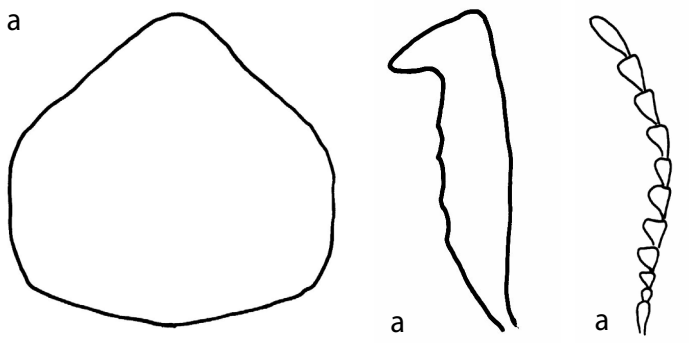


Fig. 12. *Ptilinus kejvali* sp. nov.: a – pronotum; b – the left anterior tibia; c – antennae

serrate, especially on apexes of serrated antennomeres with sparse, long, erected hairs. The 1st antennomere robust, 2.3 times longer than wide, the 2nd almost rounded, 1.1 times longer than wide, twice shorter than the 1st antennomere. The 3rd 1.2 times longer than wide, the 4th to 8th slightly transverse, 1.2 times wider than long, the 9th and the 10th 1.2 times longer than wide. The 11th clubbed with rounded sharpened apex, 3.2 times longer than wide (Fig. 12c). The last segment of maxillary palpi spindle-shaped, 2.4 times longer than wide.

Pronotum slightly transverse, ratio length : width 0.9, the widest closely behind middle, posteriorly slightly narrowed (Fig. 12a). Anterior margin with thin elevated edge, posterior margin with almost indistinct border. Lateral margin invisible from dorsal view. From anterior margin in middle with short and shallow longitudinal furrow ending before disc of pronotum. Anterior one third with very sparse, irregular, small blunt tubercles, on sides and close by disc

of pronotum denser a smaller (in centre larger, distance between them 3-4 times larger than their diameter; on other part distance between them as large as their diameter). Posterior part of pronotum with regular, dense small tubercles, distance between them smaller than their diameter. Surface of pronotum between tubercles with dense and fine punctures, punctures almost touch each other. Pubescence very fine, short, recumbent, inclined mostly backward. On sides of pronotum with sparse, long, erect, fine hairs. Scutellum rectangular, 1.2 times longer than wide.

Elytra lengthily oval, cylindrical, transversally very convex, without distinct shoulders, vaguely shining, without costae, surface with two types of punctuation - the first punctures very fine and dense, almost touching each other, the second ones sparse and coarse, their diameter slightly larger than distance between them. Pubescence short, fine, recumbent, inclined backwards.

Legs not robust, tibia short, tarsi 1.3 times longer than tibiae, thin. Anterior tibia on exterior lateral margin with sparse small teeth and with sharp and long spur (Fig. 12b). The 1st and the 2nd tarsomere of the same length, the 3rd to 5th together of the same length as the first, the 3rd twice shorter than the 2nd, the 4th 4 times shorter than the 2nd and the 5th 1.4 times shorter than the 2nd. The 1st 3.3 times longer than wide, the 2nd 5 times longer than wide, the 3rd 1.3 times longer than wide, the 4th as long as wide, the 5th 2.2 times longer than wide. Claws long and slim, without teeth.

Prosternal process short and rounded. Metasternum in posterior part with thin oval longitudinal depression on apex narrower, in middle of posterior part with longitudinal short edge. Surface shining, with sparse, fine punctures, their diameter roughly twice larger as distance between them. The 1st, 2nd and 5th ventrite shortly longer than ventrites 3rd and 4th (separately). Their surface shining, sparsely and finely punctuate, their diameter roughly twice larger than distance between them. Ending of all ventrites with short, dense, recumbent, yellow pubescence.

Male. Unknown.

Variability. Body length 5.0 - 5.9 mm, the greatest width 1.9 - 2.1 mm, antennae and tarsi lighter, almost yellow-brown.

Differential diagnosis. The species is very similar to *P. fuscus* (Geoffroy in Fourcroy, 1785), from which it differs by less distinct teeth on the anterior tibia, less serrated anterior margin of the pronotum and colour of body.

Name derivation. Dedicated to the collector of the type materials and my friend Zbyněk Kejval, well-know world specialist in Anthicidae.

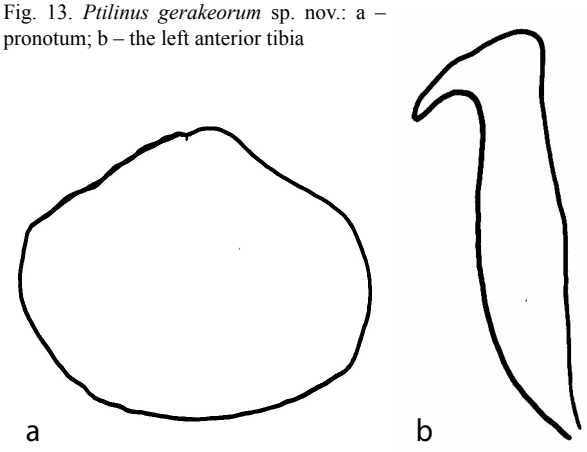
Ptilinus gerakeorum **sp. nov.**

(Pl. III - Fig. 13; Figs 13a-b)

Type material. Holotype (♀): China, Sichuan, Liziping env., near Shimian, 200 km SW of Ya'an, 27.vi.-3.vii.1991, Z. Kejval lgt., (PZPC).

Description. Female (holotype). Lengthily elongate-elliptical, transversally strongly convex,

Fig. 13. *Ptilinus gerakeorum* sp. nov.: a – pronotum; b – the left anterior tibia



almost cylindrical, body length 4.5 mm, the greatest width 1.6 mm. Ratio elytra length : elytra width of 2.0. Dark brown, head and brown dark brown. Pubescence yellowish-white. Antennae and palpi lighter.

Head transversally convex with longitudinal fine shining edge. Front separated from vertex by transversal unbordered shallow depression. Head matt, with two types of punctuation - the first punctures fine and dense, almost touch each other, the second ones coarser and sparser, umbilicate, distance between them the same as their diameter. Surface of head with dense, short, recumbent or semierect pubescence, inclined more or less forwards, with sparse, short, erect, dense hairs on front and sides of head. Labrum with sparsely semierect and long pubescence. Eyes small, only slightly convex, without pubescence. Front wide, more than 12 times wider as width of eye from dorsal view. Antennae consisting from eleven antennomeres, without antennal club, from the 3th to 10th slightly serrated. The 1st antennomere robust, twice longer than wide, the 2nd rounded, as long as wide, 2.2 times shorter as the 1st antennomere. The 3rd twice longer than wide, the 4th as long as wide, the 5th and the 6th slightly transversal, 1.1 times wider than long, the 7th and the 8th as long as wide, the 9th and the 10th shortly (1.1 times) longer than wide. The 11th lengthily oval, 2.9 times longer than wide. The last segment of maxillary palpi spindle-shaped, 2.2 times longer than wide.

Pronotum transverse, ratio length : width 0.8, the widest in the middle (Fig. 13a). Anterior margin with thin elevated edge with the small rounded teeth, posterior margin with almost indistinct border. Lateral margin invisible from dorsal view, from lateral view slightly serrate. From anterior margin in middle short and shallow (almost invisible) longitudinal furrow, ending before disc of pronotum. Surface of pronotum shinning, with sparse, small blunt tubercles, posteriorly sparser and smaller, distance between them approximately the same as their diameter; between these tubercles with dense and fine punctures, punctures almost touching each other. Pubescence fine, short, semierect or erect; semierect hairs inclined mostly backward. Scutellum almost square, as long as wide.

Elytra oval, cylindrical, transversally very convex, without distinct shoulders, vaguely shining, without costae; surface with two types of punctuation - the first punctures very fine and dense, almost touching each other, the second ones sparse and coarse, their diameter shortly larger than distance between them. Coarser punctures arranged in little distinct rows, these rows being more distinct laterally. Pubescence short, fine, recumbent or slightly semierect, dense, inclined backwards.

Legs not robust, tibia short, tarsi 1.2 times longer than tibiae, thin. Anterior tibia on exterior

lateral margin without teeth, only with sharp and long spur (Fig. 13b). The 1st tarsomere 1.6 times longer than 2nd and almost as long as other together, thin, the 3rd to 5th together as long as 2nd, the 5th larger as last penultimate. Claws long and slim, without teeth.

Prosternal process short and rounded. Metasternum in posterior part with oval longitudinal depression, in middle with longitudinal short edge. Surface shining, with sparse, fine punctures, their diameter roughly twice larger than distance between them. The 5th ventrite shortly longer than ventrites 1st to 4th (separately). Their surface shining, sparsely and finely punctuate, their diameter roughly twice larger as distance between them.

Male. Unknown.

Differential diagnosis. The species is very similar to *P. pectinicornis* (Linnaeus, 1758) and differs from it (and also from other species).by a serrated lateral margin of the pronotum.

Name derivation. Dedicated to the parents of my wife, Marie & Lubomír Gerákovi.

***Ptilinus similis* sp. nov.**

(Pl. III - Fig. 14; Figs 14a-b)

Type material. Holotype (♀): China, Shaanxi - Henan border, 33°48-53' N, 110°40-46' E, 900 - 1000 m a.s.l., 29.-31.v.1995, L. & R. Businský lgt., (PZPC). Paratype: (3 ♀♀): the same data as holotype, (PZPC).

Description. Female (holotype). Elongate-elliptical, transversally strongly convex, almost cylindrical, body length 4.1 mm, the greatest width 1.9 mm. Ratio elytra length : elytra width of 1.7. Brown, head and brown dark brown. Pubescence yellow. Antennae, palpi and legs rusty brown.

Vertex transversally convex with longitudinal rounded fine ridge. Front visibly separated by transversal unbordered shallow depression. Head matt, with two types of punctuation - the first punctures fine and dense, almost touching each other, the second ones, coarser and sparser, umbilicate, distance between them the same as their diameter. Surface of head with dense, short, recumbent or semierect pubescence, inclined more or less forwards, with sparse, short, erect, dense hairs on front and sides of head. Labrum with only very sparse semierect and long pubescence. Eyes small, only slightly convex, without pubescence. Front wide, 8 times wider than width of eye from dorsal view. Antennae consisting of eleven antennomeres, without antennal club, from the 4th to 10th slightly pectinated, almost bare. The 1st antennomere 3 times longer than wide, the 2nd rounded, as long as wide, 3 times shorter than the 1st antennomere. The 3rd transverse, triangular, 1.4 times wider than long, the 4th to 9th twice wider than long, the 10th 1.5 times wider than long. The 11th lengthily oval 2.9 times longer than wide. The last segment of maxillary palpi spindle-shaped, 2.5 times longer than wide.

Pronotum slightly transverse, ratio length : width 0.95, the widest in the middle (Fig. 14a). Anterior margin with thin elevated edge with the small teeth, on sides larger and more distinct, posterior margin with almost indistinct border. Lateral margin invisible from dorsal view. From anterior margin in middle short and shallow (almost invisible) longitudinal furrow, ending before disc of pronotum. Surface of pronotum vaguely shining, with sparse, small blunt tubercles, posteriorly sparser and smaller, distance between them approximately the same

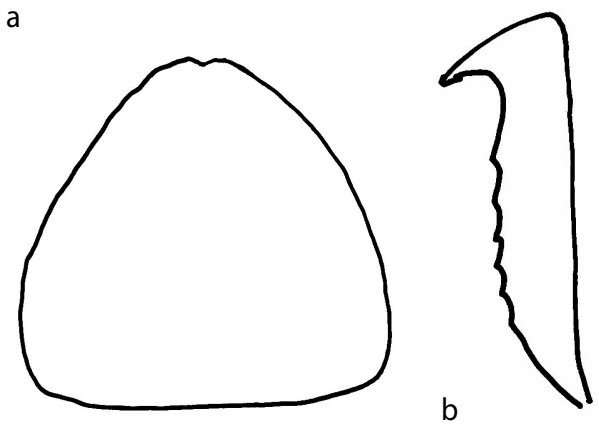


Fig. 14. *Ptilinus similis* sp. nov.: a – pronotum; b – the left anterior tibia

as their diameter; between of them with dense and fine punctures almost touching each other. Pubescence fine, short, semierect or erect; semierect hairs inclined mostly backward. On sides of pronotum in addition with sparse, long, erect, fine hairs. Scutellum almost square, as long as wide.

Elytra oval, cylindrical, transversally very convex, without distinct shoulders, vaguely shining, with 5 very slight, almost invisible costae; surface with two types of punctuation - the first punctures very fine and dense almost touching each other, the second sparse and coarse, their diameter slightly larger than distance between them. Pubescence short, fine, recumbent or slightly semierect, dense, inclined obliquely from suture backwards, partly slightly arranged in clouds.

Legs not robust, tibia short, tarsi 1.1 times longer than tibiae, thin. Anterior tibia on exterior lateral margin with few almost invisible teeth and a sharp and long spur (Fig. 14b). The 1st and the 2nd tarsomeres short, almost equal in length, the 3rd to 5th only slightly shorter than the 1st tarsomere. Claws long and slim, without teeth.

Prosternal process short and rounded. Metasternum in posterior part with thin oval longitudinal depression, in middle with longitudinal very short furrow. Surface shining, with sparse, fine punctures, their diameter roughly twice larger than distance between them. The 1st, the 2nd and the 5th ventrites slightly longer than the 3rd and the 4th ventrites (separately). Their surface shining, sparsely and finely punctuate, their diameter roughly twice larger than distance between them.

Male. Unknown.

Variability. Body length 4.0 - 4.2 mm, the greatest width 1.8 - 1.9 mm, posterior edge of pronotum more visible denticulate.

Differential diagnosis. The species differs from other species of the genus by its very dense pubescence of elytra and short length of elytra (similarly as with *P. fuscus* (Geoffroy in Fourcroy, 1785 or *P. kejvali* sp. nov., but without distinct costae).

Name derivation. Derived from Latin word “similis”. It means similar.

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