

**Review of the genus *Ptilineurus* Reitter, 1901
(Coleoptera: Bostrichoidea: Ptinidae),
with description of five new species**

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Taxonomy, descriptions, new species, Ptinidae, *Ptilineurus*, Palaearctic Region, Oriental Region

Abstract. *Ptilineurus horaki* sp. nov. (Maluku Is.), *P. indicus* sp. nov. (India), *P. laosensis* sp. nov. (Laos), *P. malayanus* sp. nov. (Malaysia) and *P. martini* sp. nov. (Thailand) - all from the Oriental Region are described, illustrated and compared with other species. The key of species belong to genus *Ptilineurus* is presented.

INTRODUCTION

The genus *Ptilineurus* Reitter, 1901 contains five species and occurs on the border of the Palaearctic and Oriental Regions (see list). Classification of this genus has evolved. Reitter (1901) classifies this genus to the subfamily Xyletininae. Pic (1912) classifies this genus to the subfamily Ptilininae. Español (1970) redeployed this genus to the subfamily Hedobinae (newly Eucradinae) and White (1971) agreed with him. White (1974a) firstly removed this genus to the subfamily Dryophilinae. But also Sakai (1985) mentioned this genus in the subfamily Hedobiinae (newly Eucradinae). Zahradník (2007, 2013; Zahradník & Háva 2014) used classification according to White (1974b) and assigned it to the subfamily Dryophilinae. It was based on the key for former subfamilies of the family Anobiidae (White 1974b), modified for the family Ptinidae (formerly two separate families - Anobiidae and Ptinidae) by Zahradník (2013). Toskina (2017) again sorted this genus to the subfamily Eucradinae based on identification marks on antennae and aedeagus. Only DNA analysis could give the final result.

The genus *Ptilineurus* Reitter, 1901 together with the genus *Ptilinastes* Lesne, 1913 (only one species from Japan) belong to the tribe Ptilineurini White, 1982 (Zahradník & Háva 2014).

MATERIAL AND METHODS

I studied all original description species from the genus *Ptilineurus* Reitter, 1901 (Fairmaire 1895; Kiesenwetter 1879; Reitter 1895; Pic 1907; Toskina 2017). I had all known species from this genus available for study (unfortunately not type materials).

The habitus photographs were made by 3D Microscope with Full HD Camera.

The type material deposited in the author's collection. The new species described here is

provided with a red printed label showing the following words: “Holotype” or “Paratype”; on the other white printed label, there is the text: “*Ptilineurus/species name*, sp. n. / P. Zahradník det.”.

LIST OF *PTILINEURUS* REITTER, 1901

<i>Ptilineurus elegans</i> (Fairmaire, 1895)	Thailand, Vietnam
<i>Ptilineurus horaki</i> sp. nov.	Maluku Is. (Seram I.)
<i>Ptilineurus indicus</i> sp. nov.	India
<i>Ptilineurus laosensis</i> sp. nov.	Laos
<i>Ptilineurus malayanus</i> sp. nov.	Malaysia
<i>Ptilineurus martini</i> sp. nov.	Thailand
<i>Ptilineurus marmoratus</i> (Reitter, 1895)	China, Indonesia, Japan
= <i>P. ramicornis</i> (Kiesenwetter, 1879)	(introduced to Sweden and U.S.A.)
<i>Ptilineurus pictipennis</i> (Fairmaire, 1895)	China (Jiangsu, Shaanxi, Sichuan, Taiwan)
<i>Ptilineurus sumatrensis</i> Pic, 1907	Indonesia (Sumatra I.), Andaman Is.
<i>Ptilineurus sichuanensis</i> Toskina, 2017	China (Sichuan)

TAXONOMY

Ptilineurus horaki sp. nov.

(Fig. 1)

Type material. Holotype (♀): MALUKU Is., Seram I., 12 km SE Wahai, Solea, 31 October - 4 November 1998, J. Horák lgt.

Description. Female (holotype). Oval, transversally convex, body length 6.0 mm, the greatest width 1.5 mm. Elytra length/width ratio of 1.5. Body black, the first two antennomeres rusty, other black, palpi and legs rusty. Habitus see Fig. 1.

Head flattened, with sparse white scales, 3 times longer than wide, on end sharpened arranged in middle of head posteriorly, on lateral margin arranged to middle of head. Clypeus the same scales arranged in one row anteriorly. Surface shiny matt, with double punctures - the first coarse and sparse, distance between punctures 1.5 times bigger than their diameter, the second very fine and dense. Eyes large, globular, glabrous. Front 5.2 times wider than width of eye in dorsal view. Antennae pectinated, consisting of eleven antennomeres. The 1st antennomere robust, 1.8 times longer than wide, conic. The 2nd 1.5 times longer than wide, the same width as the 1st on apex and 3 times shorter. The 3rd as long as the 1st and 2nd together, slightly serrated, twice longer than wide. Antennomeres 4th-10th pectinated. The 4th 0.8 times shorter as wide, 0.8 times shorter than previous. The 5th the same length as the 4th, but twice wider than long. The 6th and the 7th the same length as previous, twice wider than long. The 8th only 0.8 length of the previous, 1.2 times wider than long. The 9th and 10th similar as the 8th, slightly shorter and narrower. The last antennomere the same length as 8th-10th together, 4 times longer than wide, the widest on apex, not pectinated. From the 3rd antennomere with black, dense, long, erect hairs.

Pronotum transverse, length/width ratio of 0.5, the widest in the last third (lateral margin in this part is parallel), before base narrowed. The first third posteriorly bell-shaped. Middle of pronotum before base with blunt bumps, inclined backwards, lateral margins flattened. Surface shiny matt, with double punctures - the first coarse and very dense, almost touched their diameter 0.5 smaller as distance between them, the second very fine and dense. Lateral and anterior part of pronotum and top of bumps with the same scales as on head.

Scutellum transversally triangular, twice wider than long.

Elytra with very distinct shoulders and small bumps on transversal margin of scutellum, matt shiny, with dense punctures almost touched, puncture smaller as on pronotum. On each elytron after shoulders beside as sutura with shallow depression. Scales, the same as on head and pronotum, arranged to three transversal stripes. The first is on anterior margin of elytra, on the sides is wider on lateral margin, the 2nd is in half of elytra, and the third in the last third of elytra, both are crabbed. All three stripes are linked by longitudinal stripes along sutura. Apex of elytra is covered with narrow strips also these same scales.

All legs robust, almost the same. Tibia the same length as tarsi. The 1st tarsomere of anterior leg the longest, 3 times longer than wide, the 2nd twice shorter than previous, the 3rd slightly transverse, 0.8 shorter than previous. The 4th tarsomere with apical excavation going to one half of their length. The 5th tarsomere is as long as 2nd-4th together.

Metasternum shiny, densely finely punctuated, punctures almost touched, glabrous, in middle with visible longitudinal slim line and shortly before posterior part with deeper depression along this line, ending shortly before of posterior margin of metasternum. Mesocoxae distant.

Abdominal sternites shiny, densely finely punctuated, punctures almost touched. The 1st sternite the widest, in middle with sharp short spur. The 2nd twice shorter than previous, in middle narrower. The 3rd very short, twice shorter than previous in the middle. The 4th as long as the 1st. The 5th shortly narrower as previous.

Male. Unknown.

Differential diagnosis. See key of species.

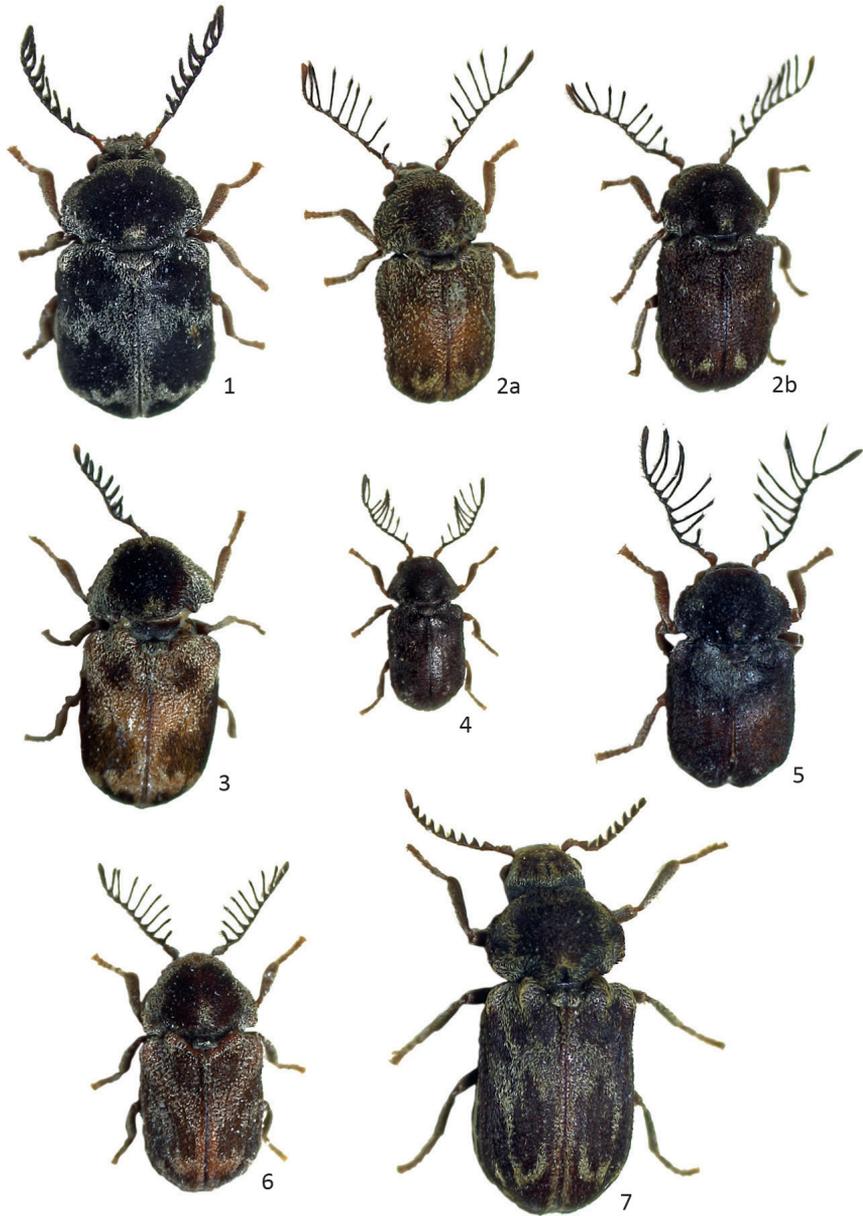
Name derivation. Patronymic. Dedicated to the collector of the holotype (Jan Horák, Prague, Czech Republic), my very good friend and well-known specialist on the family Mordelidae.

***Ptilineurus indicus* sp. nov.**

(Figs. 2a, b, 11a, b)

Type material. Holotype (♂): INDIA S, Tamil Nadu, Nilgiri hills, SE of Kotagiri near Kunchappanal, 900 m elevation, 13-20 May 1994, 11°22' S, 76°56' E, Z. Kejval & Sauer R. lgt. Paratype (1 ♀): INDIA S, Tamil Nadu, Nilgiri hills, SE of Kotagiri near Kunchappanal, 900 m elevation, 22 May 1999, 11°22' S, 76°56' E, Z. Kejval & M. Trýzna lgt.

Description. Male (holotype). Oval, transversally convex, body length 2.6 mm, the greatest width 1.3 mm. Elytra length/width ratio of 1.3. Body unicolour dark brown, the first two



Figs. 1-10. Habitus: 1- *Ptilineurus horaki* sp. nov. (♀); 2a- *Ptilineurus indicus* sp. nov. (♂); 2b- *Ptilineurus indicus* sp. nov. (♀); 3- *Ptilineurus laosensis* sp. nov. (♀); 4- *Ptilineurus malayanus* sp. nov. (♂); 5- *Ptilineurus martini* sp. nov. (♂); 6- *Ptilineurus elegans* (Fairmaire, 1895) (♂); 7- *Ptilineurus marmoratus* (Reitter, 1895) (♀); 8a- *Ptilineurus pictipenis* (Fairmaire, 1895) (♂); 8b- *Ptilineurus pictipenis* (Fairmaire, 1895) (♀); 9- *Ptilineurus sumatrensis* Pic, 1907 (♀); 10a- *Ptilineurus sychuanensis* Toskina, 2017 (♂); 10b- *Ptilineurus sychuanensis* Toskina, 2017 (♀).



8a



8b



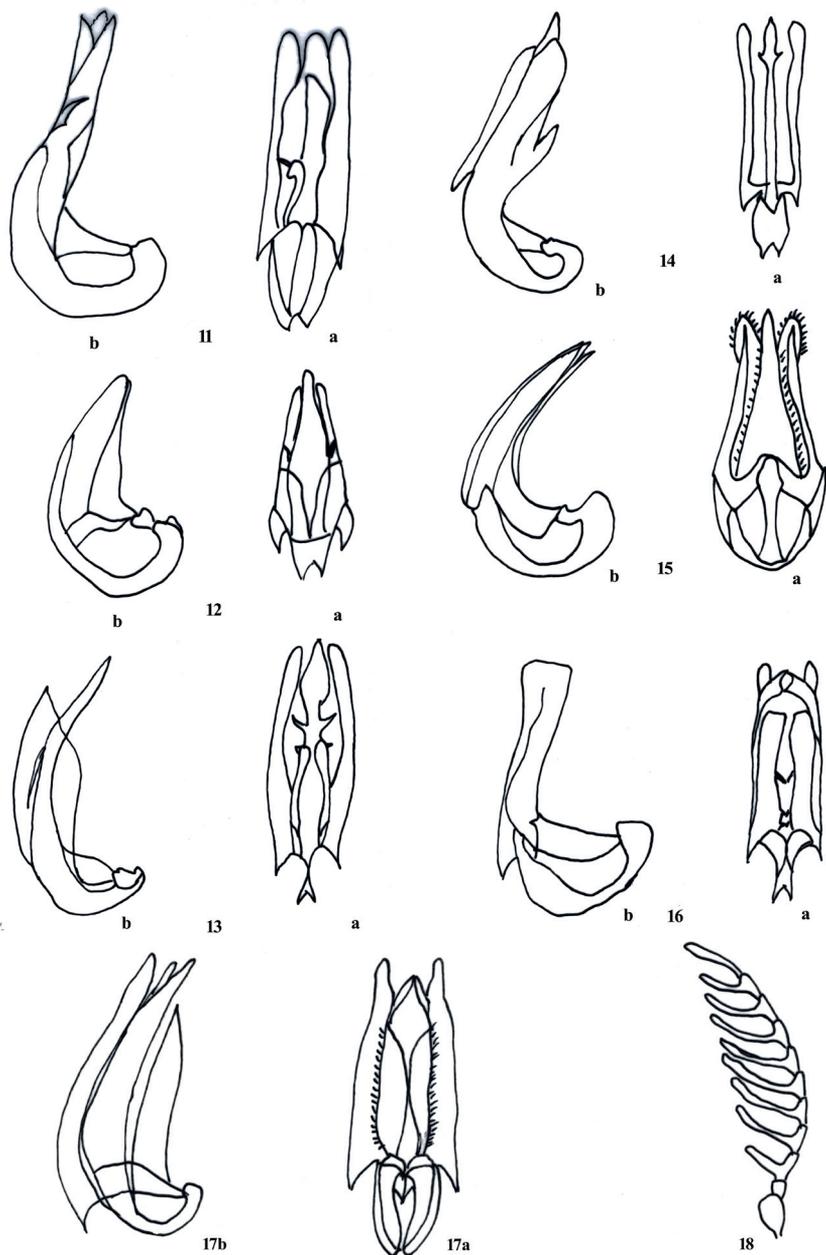
9



10a



10b



Figs. 11-18. Aedeagus- a- dorsal view, b- lateral view: 11- *Ptilineurus indicus* sp. nov.; 12- *Ptilineurus malayanus* sp. nov.; 13- *Ptilineurus martini* sp. nov.; 14- *Ptilineurus elegans* (Fairmaire, 1895); 15- *Ptilineurus marmoratus* (Reitter, 1895); 16- *Ptilineurus pictipenis* (Fairmaire, 1895); 17- *Ptilineurus sychuanensis* Toskina, 2017; 18- *Ptilineurus marmoratus* (Reitter, 1895), male antennae.

antennomeres and apex of 11th antennomere rusty, other brown, palpi and legs rusty. Habitus see Fig. 2a.

Head flattened, with sparse white hairs arranged in middle of head posteriorly, on lateral margin arranged to middle of head. Clypeus with the same hairs, inclined anteriorly. Surface shiny matt, with double punctures - the first coarse and sparse, distance between punctures 1.5 times bigger than their diameter, the second very fine and dense. Eyes large, globular, glabrous. Front 7 times wider than width of eye in dorsal view. Antennae pectinated, consisted of eleven antennomeres. The 1st antennomere robust, 2.1 times longer than wide, conic. The 2nd as long as wide, the same width as the 1st and 5 times shorter. Antennomeres 3rd-10th pectinate. The 3rd longest from pectinate antennomere, 1.2 times longer than wide, the same width as 2nd, the same length as the 1st and 2nd together. The 4th 2.6 times wide as long, 1.4 times shorter than previous. The 5th 0.6 times shorter than 4th, 5 times wider than long. The 6th to 10th very similar as 5th, each very slightly shorter than previous. The last antennomere the same length as 5th-10th together, 5 times longer than wide, the widest on apex, not pectinated, the same length as rami of previous antennomere. From the 3rd antennomere with brown, dense, long, fine, erect hairs.

Pronotum transverse, length/width ratio of 0.7, the widest shortly before of base. The lateral margin dentate, posteriorly slightly flattened. Surface shiny matt, with double punctures - the first coarse and very dense, almost touched their diameter 0.5 smaller as distance between them, the second very fine and dense. Lateral and anterior part of pronotum with white, sparse recumbent hairs.

Scutellum transversally, 3 times wider than long, with white, dense, recumbent hairs.

Elytra with only slightly visible shoulders and small bumps on transversal margin of scutellum (visible from lateral view), matt shiny, with dense punctures almost touched, puncture smaller as on pronotum. On each elytron in the first third with transversally shallow depression, each elytron without ornaments and glabrous, without scales. Before apex of each elytron with almost invisible (visible from posterior view) with small spots from white small scales.

All legs robust, almost the same. Tibia the same length as tarsi. The 1st tarsomere of anterior leg the longest, 3 times longer than wide, the 2nd twice shorter than previous, the 3rd slightly transverse, 0.8 shorter than previous. The 4th tarsomere with apical excavation going to one half of their length. The 5th tarsomere is as long as 2nd-4th together.

Metasternum in middle with longitudinal shallow depression, connecting anterior and posterior side. Surface glabrous, shining, finely and densely punctuated.

Abdominal sternites shiny densely finely punctuated, punctures almost touched. The 1st sternite the longest, 1.5 times longer than following, in middle triangular spur. The 2nd-4th the same long, the 5th shortly longer than previous.

Aedeagus from dorsal view asymmetric (median lobe), from lateral view strongly crooked - see Figs. 11a, b.

Female. Pectinate antennomeres shortly narrower than with the male. Habitus see Fig. 2b.

Differential diagnosis. See key of species.

Name derivation. Derived from the name of place of its distribution - India.

Ptilineurus laosensis sp. nov.

(Fig. 3)

Type material. Holotype (♀): LAOS centr., 70 km NE Vientiane, Ban Phabat env., 150 m, 18°16.1' N, 103°10.9' E, 27 April -1 May 1997, E. Jendek & O. Šauša lgt.

Description. Female (holotype). Oval, transversally convex, body length 3.6 mm, the greatest width 1.8 mm. Elytra length/width ratio of 1.4. Body dark brown, the first two antennomeres rusty, other dark brown, palpi and legs rusty. Habitus see Fig. 3.

Head flattened, shiny matt, finely and densely punctuated. Eyes small, globular, glabrous. Front 3 times wider than width of eye in dorsal view. Antennae pectinated, consisted of eleven antennomeres. The 1st antennomere robust, 2.7 times longer than wide, oval. The 2nd as long as wide, rounded, the same width as the 1st and 5 times shorter. The 3rd antennomere serrated, twice longer than wide and twice wider than previous. Antennomeres 4th-10th pectinated. The 4th twice wide as long, twice shorter than previous. The 5th 0.8 times shorter than 4th, twice wider than long. The 6th to 10th very similar, each very slightly shorter than the previous one, twice wider than long. The last antennomere the same length as 9th-10th together, 2.5 times longer than wide, the widest on apex, not pectinated, the same length as rami of previous antennomere. From the 3rd antennomere with brown, dense, long, fine, erect hairs.

Pronotum transverse, length/width ratio of 0.6, the widest shortly before the base. The lateral margin finely dentate, posteriorly slightly flattened. Middle of pronotum in posterior part with blunt bump, on their sides with depression. Surface shiny matt, with doubles punctures - the first coarse and very dense, almost touched their diameter 0.5 smaller than distance between them, the second very fine and dense. Surface of pronotum with white short dense recumbent pubescence, partly inclined forwards (on posterior and lateral part) partly backwards (in posterior margin). In middle of anterior part with triangular spur, narrower posteriorly. Also top of bump with a few white hairs. Disc of pronotum with short recumbent dark brown pubescence.

Scutellum transversally triangular, length/width ratio of 0.5, with white hairs.

Elytra with distinct shoulders, and on sides of scutellum with distinct bump. On each elytron in the first third with transversally shallow depression, sutura in the first halve elevated. Surface matt shiny, with dense punctures almost touched. Anterior margin, depression on elytra, narrow stripe along sutura and transverse spot before apex of elytra rusty. Surface with short recumbent white dense coarse pubescence, more visible on rusty part of elytra.

All legs robust, almost the same. Tibia the same length as tarsi. The 1st tarsomere of anterior leg the longest, 3 times longer than wide, the 2nd twice shorter than previous, the 3rd slightly transverse, 0.8 shorter than previous. The 4th tarsomere with apical excavation going to one half of their length. The 5th tarsomere is as long as 2nd-4th together.

Metasternum in middle of posterior margin with short narrow longitudinal oval depression, prolonged forwards to slight edge. Surface shining, almost glabrous, with dense fine punctures, almost touched.

Abdominal sternites shiny densely finely punctuated, punctures almost touched, with sparse white recumbent pubescence. The 1st sternite the longest, in middle shorter, 1.5 times

longer than the following, in middle triangular spur. The 2nd-4th always shorter than the previous one. The 5th as long as the 1st.

Male. Unknown.

Differential diagnosis. See key of species.

Name derivation. Derived from the name of place of its distribution - Laos.

***Ptilineurus malayanus* sp. nov.**

(Figs. 4, 12a, b)

Type material. Holotype (♂): MALAYSIA, Benom Mts., 15 km E Kampong Dong, 700 m, 3.53°N, 102.01°E, 1 April 1998, L. Dembický & P. Pacholátka lgt.

Description. Male (holotype). Oval, transversally convex, body length 2.1 mm, the greatest width 1.0 mm. Elytra length/width ratio of 1.4. Body unicolour piceous, the first two antennomeres rusty, other black, palpi and legs rusty. Habitus see Fig. 4.

Head flattened, only on anterior part with dense white hairs inclined anteriorly. Surface shiny matt, with doubles punctures - the first coarse and dense, distance between punctures as the same as their diameter, the second very fine and dense. Eyes large, globular, glabrous. Front 6.6 times wider than width of eye in dorsal view. Antennae pectinated, consisted of eleven antennomeres. The 1st antennomere robust, 2.9 times longer than wide, oval. The 2nd as long as wide, almost rounded, the same width as the 1st and 5 times shorter. Antennomeres 3rd-10th pectinate. The 3rd longest from pectinate antennomeres, 1.2 times longer than wide, the same width as 2nd, the same length as the 1st and 2nd together. The 4th 2.5 times wider than long, twice shorter than previous. The 5th 0.8 times shorter than 4th, 3 times wider than long. The 6th to 10th very similar, each very slightly shorter than the previous one, approximately 5.5 times wider than long. The last antennomere the same length as 6th-10th together, 7 times longer than wide, the widest on apex, not pectinated, the same length as rami of previous antennomere. From the 3rd antennomere with brown, dense, long, fine, erect hairs.

Pronotum transverse, length/width ratio of 0.7, the widest shortly before of base. The lateral margin dentate, posteriorly slightly flattened. Before base of pronotum with depression on each side. Surface shiny matt, with doubles punctures - the first coarse and very dense, almost touched their diameter 0.5 smaller as distance between them, the second very fine and dense. Surface of pronotum with dark brown, sparse recumbent hairs.

Scutellum transversally triangular, length/width ratio of 0.5, without hairs.

Elytra with only slightly visible shoulders, matt shiny, with dense punctures almost touched. On each elytron in the first third with transversally shallow depression, each elytron without ornaments and with short sparse recumbent pubescence.

All legs robust, almost the same. Tibia the same length as tarsi. The 1st tarsomere of anterior leg the longest, 3 times longer than wide, the 2nd twice shorter than previous, the 3rd slightly transverse, 0.8 shorter than previous. The 4th tarsomere with apical excavation going to one half of their length. The 5th tarsomere is as long as 2nd-4th together.

Metasternum in middle of posterior margin with short narrow longitudinal oval depression. Surface shining, almost glabrous, with dense fine punctures, almost touched.

Abdominal sternites shiny densely coarsely punctuated, punctures almost touched, glabrous. The 1st sternite the longest, in middle shorter, 1.5 times longer than following, in middle short triangular spur. The 2nd-4th always shorter than the previous one. The 5th as long as the 1st.

Aedeagus from dorsal view symmetric, from lateral view strongly crooked - see Figs. 12a, b.

Female. Unknown.

Differential diagnosis. See key of species.

Name derivation. Derived from name of place of its distribution - Malaysia.

***Ptilineurus martini* sp. nov.**

(Figs. 5, 13a, b)

Type material. Holotype (♂): THAILAND S, Yala distr., Betong, April 1993, J. Horák lgt.

Description. Male (holotype). Oval, transversally convex, body length 2.5 mm, the greatest width 1.3 mm. Elytra length/width of 1.4. Body black, the first two antennomeres and apex of 11th antennomere rusty, other black, palpi and legs rusty. Habitus see Fig. 5.

Head flattened, sides and anterior part with dense white fine scales inclined anteriorly. Surface shiny matt, with double punctures - the first coarse and dense, distance between punctures as the same as their diameter, the second very fine and dense. Eyes large, globular, glabrous. Front 6 times wider than width of eye in dorsal view. Antennae pectinated, consisted of eleven antennomeres. The 1st antennomere robust, 3 times longer than wide. The 2nd almost rounded, slightly wider than the 1st antennomere on apex, 5 times shorter. Antennomeres 3rd-10th pectinate. The 3rd longest from pectinate antennomeres, 1.2 as long as wide, on base the same wide as previous antennomere, the same length as 1st and 2nd antennomeres together. The 4th 3 times wider than long, 0.8 times shorter than previous. The 5th 0.8 times shorter than 4th, 5 times wider than long. The 6th to 10th very similar, each very slightly shorter than previous, 7 times wider than long. The last antennomere the same length as 6th-10th together, 8 times longer than wide, the widest on apex, not pectinated, the same length as rami of previous antennomere. From the 3rd antennomere with brown, dense, long, fine, erect hairs.

Pronotum transverse, length/width ratio of 0.6, the widest shortly before of base. The lateral margin dentate, posteriorly flattened. Before base of pronotum with deep depression on each side. Middle of pronotum before base with blunt bump, inclined backwards. Surface shiny matt, with double punctures - the first coarse and very dense, almost touched their diameter 0.5 smaller as distance between them, the second very fine and dense. Lateral, anterior part and top of blunt of pronotum with white, sparse recumbent hairs.

Scutellum transversally triangular, length/width ratio of 0.5, without hairs.

Elytra with very distinct shoulders and small bumps on transversal margin of scutellum, matt shiny, with dense punctures almost touched. On each elytron in the first third with transversally shallow depression, each elytron without ornaments and with short sparse recumbent pubescence.

All legs robust, almost the same. Tibia the same length as tarsi. The 1st tarsomere of anterior leg the longest, 3 times longer than wide, the 2nd twice longer than previous, the 3rd as long as wide, 0.8 shorter than previous. The 4th tarsomere with apical excavation going to one half of their length, slightly transverse. The 5th tarsomere is as long as 3rd-4th together.

Metasternum with longitudinal narrow depression. Surface shiny, glabrous, densely and coarsely punctuated.

Abdominal sternites covered by white scales, densely on margins. Surface shiny matt, with dense punctures, almost touched their diameter 0.5 smaller as distance between them.

Aedeagus from dorsal view symmetric, from lateral view strongly crooked - see Figs. 13a, b.

Female. Unknown.

Differential diagnosis. See key of species.

Name derivation. Derived from name of my youngest son Martin.

OTHER EXAMINED MATERIAL

Ptilineurus elegans (Fairmaire, 1895): CHINA, N Sichuan, Xiao-Zhaizi Nat., Nature Reserve, 4 km NNE of Qingpianxiang, Zhenghecun, 32°03'27" N, 103°59'37" E, 23.-26. vi.2017, 1350-1850 m, 5 ♀♀, O. Konvička lgt.; THAILAND W, Chantanaburi distr., Nam Tok, 1-3 May 1998, 1 ♂, 2 ♀♀, J. Horák lgt. THAILAND W, Chantanaburi distr., Khao Soi Dao, 5-13 May 1998, 1 ♀, J. Horák lgt. **New species for Thailand.**

Ptilineurus marmoratus (Reitter, 1895): CHINA, Shaanxi, Lüelang, 22-25 May 2000, 1 ♀, E. Kučera lgt. CHINA, Shaanxi, Čun-Čan, 26 May -1 June 2000, 2 ♀♀, E. Kučera lgt.

Ptilineurus pictipennis (Fairmaire, 1895): TAIWAN, Taltung prov., Taiyuan env., 23.08212° N, 121.21433° E, 248 m, 11-12 May 2012, 2 ♂♂, 15 ♀♀, W. Grosser lgt. **New species from Taiwan.**

Ptilineurus sumatrensis Pic, 1907: ANDAMAN Is., Havelock I., env. of village No. 7, 11°59' N, 92°58' E, 22 April -14 May 1998, 3 ♀♀, K. & S. Majer lgt. **New species for Andaman Is.**

Ptilineurus sychuanensis Toskina, 2017: CHINA SE, Sichuan, Jinpo Shan, 29°01' N, 107°14' E, 1700 m, 24-29 June 1998, 1 ♂, J. Farkač lgt. (J. Farkač, D. Král, J. Schneider & A. Smetana Expedition). CHINA SE, Sichuan, Jinpo Shan, 29°01' N, 107°14' E, 1700 m, 24-29 June 1998, 1 ♀, J. Schneider lgt. (J. Farkač, D. Král, J. Schneider & A. Smetana Expedition).

KEY TO SPECIES OF THE GENUS *PTILINEURUS* REITTER, 1901

- 1 Lateral margin of pronotum smooth 2
- Lateral margin of pronotum dentate 3
- 2 Elytra with three distinct transverse stripes from white long scales; the 3rd antennomere 1.5 longer than wide, slightly serrated, antennae of female pectinated *P. horaki* sp. nov.
- Elytra with three distinct transverse stripes from white short scales; the 3rd antennomere as long as wide, slightly pectinate, antennae of female serrated *P. pictipennis* (Fairmaire, 1895)
- 3 Body unicolor, piceous or black, without any ornaments 4
- Body bicolour or with ornaments 6
- 4 Each elytron with two distinct depression *P. malayanus* sp. nov.
- Elytra without depression 5
- 5 Apex of the last antennomere rusty, head in middle with longitudinal stripe from white scales
..... *P. indicus* sp. nov.
- The last antennomere unicolour black, head without longitudinal stripe *P. martini* sp. nov.
- 6 Body bicolour, piceous and rusty; rusty colour on base of elytra transversal, other almost rounded in middle of elytra and shortly transverse before apex of elytra; also narrow part beside of sutura rusty
..... *P. sumatrensis* Pic, 1907
- Body with ornaments from white hairs 7
- 7 Ornaments on elytra also indistinct, with three fine ribs *P. sychuanicus* Toskina, 2017
- Ornaments on elytra distinct, without ribs 8
- 8 Body piceous, stripes on elytra arranged longitudinal, before apex also transversal
..... *P. marmoratus* (Reitter, 1877)
- Body rusty, stripes on elytra arranged transversally 9
- 9 The 3rd female antennomere pectinated, wider than long *P. elongatus* (Fairmaire, 1895)
- The 3rd female antennomere serrated, longer than wide *P. laosensis* sp. nov.

ACKNOWLEDGEMENTS. I would like to thank all collectors of type and other material - L. Dembický (Brno, Czech Republic), J. Farkač (Praha, Czech Republic); W. Gösser (Opava, Czech Republic); J. Horák (Praha, Czech Republic), Z. Kejval (Domažlice, Czech Republic), E. Kučera (Soběslav, Czech Republic), †K. Majer (Brno, Czech Republic), P. Pacholátko (Brno, Czech Republic), R. Sauer (Praha, Czech Republic), J. Schneider (Praha, Czech Republic), M. Trýzna (Děčín, Czech Republic), E. Jendek, O. Šauša (both Bratislava, Slovakia) for providing the type specimens for description and donation of these type materials. I would also like to thank Jiří Háva (Únětice u Prahy, Czech Republic) for technical help with photographs and Petra Jelínková (Praha, Czech Republic) for language correction. The paper was supported by the Ministry of Agriculture of the Czech Republic, Institutional support MZE-RO0118.

REFERENCES

- ESPAÑOL F. 1970: Notas sobre anóbidos (Col.) XLVI.-XLVIII. [XLVI. Contribución al conocimiento de la subfamilia Hedobiinae; XLVII. El género *Xenogonus* Broun; XLVIII. A propósito del *Xyletinus pauliani* Pic]. *Memorias de la Real Academia de Ciencias y Artes de Barcelona* 40: 457-482.
- FAIRMAIRE L. 1895: Deuxième note sur quelques coléoptères des environs de Lang-Song. *Annales de la Société Entomologique de France* 39: 173-190.
- KIESENWETTER E. A. H. VON. 1879: Coleoptera japonica collecta a Domino Lewis et aliis. *Deutsche Entomologische Zeitschrift* 23: 305-320.
- PIC M. 1907: Note III. Divers Coléoptères nouveaux provenant en majeure partie des indes néerlandaises. *Notes from the Leyden Museum* 29: 57-62.
- PIC M. 1912: *Coleopterorum Catalogus*. Pars 48 - Anobiidae. In: JUNK W. & SCHENCKLING S. (eds.): *oleopterorum Catalogus*. Berlin: W. Junk, 92 pp.
- REITTER E. 1877: Beiträge zur Käferfauna von Japan. (Drittes Stück.). *Deutsche Entomologische Zeitschrift* 21: 289-296.

- REITTER E. 1901: Analytische Uebersicht der palaearktischen Gattungen und Arten der Coleopteren-Familien: Byrrhidae (Anobiidae) und Cioidae. *Verhandlungen des Naturforschenden Vereins in Brünn* 40: 3-64.
- SAKAI M. 1985: Anobiidae. Pp. 136-144 + Plt. 22-23. In: KUROSAWA Y., HISAMATSU S. & SASAJI H. (eds.): *The Coleoptera of Japan in Color. Vol. 3*. Osaka: Hoikusha Publishing Co., Ltd., 465 pp. + plts. 22-23. [in Japan].
- TOSKINA I. N. 2017: [New species of the genus *Ptilineurus* Reitter, 1901 (Coleoptera: Ptinidae: Eucradinae) from southwest China.]. *Byulletin Moskovskogo Obschestva Ispitateley Prirody. Otdel' Biologii* 122(3): 12-17.
- WHITE R. E. 1971: Key to North America Genera of Anobiidae, with Phylogenetic and Synonymic Notes (Coleoptera). *Annals of the Entomological Society of America* 64: 179-191.
- WHITE R. E. 1974a: The Dorcatominae and Tricoryninae of Chile (Coleoptera: Anobiidae). *Transaction of the American Entomological Society* 100: 191-253.
- WHITE R. E. 1974b: Type species for world genera of Anobiidae (Coleoptera). *Transaction of the American Entomological Society* 99: 415-475.
- ZAHRADNÍK P. 2007: *Ptinidae (without Gibbiinae and Ptininae)*. Pp. 339-362. In: LÖBL I. & SMETANA A. (eds.): *Catalogue of Palaearctic Coleoptera. Elateroidea - Derodontoidea - Bostrichoidea - Lymexyloidea - Cleroidea - Cucujoidea. Volume 4*. Stenstrup: Apollo Books, 935 pp.
- ZAHRADNÍK P. 2013: *Brouci čeledi červotočovití (Ptinidae) střední Evropy. Beetles of the family Ptinidae of Central Europe*. Praha: Academia, 351 pp. + 60 pls.
- ZAHRADNÍK P. & HÁVA J. 2014: Catalogue of the world genera and subgenera of the superfamilies Derodontoidea and Bostrichoidea (Coleoptera: Derodontiformia, Bostrichiformia). *Zootaxa* 3754(4): 301-352.

Received: 28.5.2021

Accepted: 30.6.2021

Printed: 5.10.2021

