# A new species of *Anthaxia* (*Haplanthaxia*) Reitter (Coleoptera: Buprestidae: Anthaxiini) from Taiwan

Mikuláš PLACHETKA11 & Uitsiann ONG21

<sup>1)</sup>Letňanská 330/15, 190 00, Praha, Czech Republic e-mail: nicolas.coleoptera@gmail.com <sup>2)</sup>Tainan City, Taiwan e-mail: weichangwang@gmail.com

## Taxonomy, new species, Coleoptera, Buprestidae, Anthaxia, Oriental region, Taiwan

**Abstract.** A new species of genus *Anthaxia* (*Haplanthaxia*) Reitter, 1911 from Taiwan is described and illustrated here, *Anthaxia svatopluki* sp. nov., which belongs to the *A. aeneocuprea* species group.

## INTRODUCTION

The Anthaxia (Haplanthaxia) aeneocuprea species group was revised by Bílý (2015), Bílý (2020) added another species later – Anthaxia vicesimasexta Bílý, 2020, described from Taiwan. In 2021 some specimens were cought, which turned to be new species described here.

## MATERIAL AND METHODS

A Canon 80D digital camera attached with Canon MP-E65mm f/2.8-5x macro lens was used to capture the color images. The body length was measured in the middle of the body following the elytral suture (the same for the pronotal and elytral length); width of body means the maximum body width (usually the maximum span between lateral pronotal margins or span between outer margin of humeral callosities). The double slash (//) is used for separating data on the different labels, the square brackets ([]) for clarification of the text of the locality labels, comma (,) is used for separating lines of text on one label.

Codens of collections used in the text:

MPCP Mikuláš Plachetka collection, Praha, Czech Republic;

UOCT Uitsiann Ong collection, Tainan City, Taiwan;

NMPC National Museum, Praha, Czech Republic;

NMNST National Museum of Natural Sciences, Taichung City, Taiwan.

## **TAXONOMY**

## Anthaxia svatopluki sp. nov.

(Figs. 1-5)

Type locality. Taiwan, Kaohsiung City, Baolai.

**Type material.** Holotype ( $\ \%\ NMNST$ ): Taiwan, Kaohsiung City, Baolai, 26. iii. 2021, Uitsiann Ong, leg.; allotype ( $\ \%\ NMPC$ ): same data as holotype; paratypes ( $\ \%\ \%\ , \ 2\ \subsetneq \ MPCP,\ NMPC,\ UOCT$ ): same data as holotype, except one  $\ \hookrightarrow\ UOCT$ ): Taiwan, Pingtung county, Dahanshan, 26.v.2021, Chiamu Chen leg. All type specimens bear red labels with printed text: HOLOTYPE [ALLOTYPE, PARATYPE respectively], Anthaxia, (Haplanthaxia), svatopluki sp. nov., det. M. Plachetka & U. Ong 2022.

Type specimens examined. Anthaxia (Haplanthaxia) agilis Obenberger, 1958: Lectotype (& NMPC): Puer,

1400 m, Yunnan, V. Popov [leg., in Russian] // [the same label, but in Chinese] // Yunnan pref. // Cotype [red, black framed, printed] // Anthaxia agilis m. Cotype [handwritten] Det. Dr. Obenberger [printed] // LECTOTYPE, Anthaxia, Haplanthaxia, agilis, Obenberger 1958, Sv. Bílý design. 2015 [red, printed]; Paralectotype (\$\pi\$ NMPC): Puer, 1400 m, Yunnan, Kryzhanovski [leg., in Russian] // [the same label, but in Chinese] // Yunnan pref. // Cotype [red, black framed, printed] // Anthaxia agilis m. Cotype [handwritten] Det. Dr. Obenberger [printed] // PARALECTOTYPE, Anthaxia, Haplanthaxia, agilis, Obenberger 1958, Sv. Bílý design. 2015 [red, printed].

Additional specimens examined. Anthaxia (Haplanthaxia) agilis Obenberger, 1958: LAOS: NE Laos 3 -7. v. 2001, Houa – Phan Prov. 1400m, Xam – Neua, Ban Saleui village [missing name of collector – local collector?] {1 ♂ NMPC}; <u>THAILAND</u>: NW THAILAND, 1. - 6. v. 1991, SOPPONG – PAI [road] 1800m, LEG. PACHOLÁTKO, {1 ♀ NMPC}. Both specimens bear white determination label: ANTHAXIA, (Haplanthaxia), agilis, Obenberger 1958, Sv. Bílý det. 2015.

**Diagnosis.** Darker, brown bronze species, elytra parallel, tapering in posterior third. Elytra 2.1 times as long as wide in both sexes. Whole body surface is covered by sparse, white setae. Middle sized to big species (considering in terms of *Anthaxia* (*Haplanthaxia*) aeneocuprea species group) 4.3-5.8 mm. Pronotum, scutellum, elytra and ventral side brown bronze, frons with green tinge in male (frons bronze in female, sometimes with very slight green tinge, more distinct only on clypeus), slight tinge is also present at inner margins of eyes, humeral callosities and pronotal margins. Pronotum depressed in posterior angles, elytra triangularly depressed from humeral callosities to the second third along sutural margins, shallowly depressed along lateral margins and in posterior fourth depressed along suture. Transverse, basal depression is deep, reaching from anterior margin of humeral callosities to scutellum, elytral surface with reddish tinge in this depression. Legs almost same in both sexes, protibiae green in both sexes, with brown tarsi and adhesive pads, meso- and metatibiae bronze with brown tarsi and adhesive pads. Male promeso- and metatibae are finely serrate on inner margin.

**Description of holotype.** Holotype male (Figs. 1, 2, 5). Head partly retracted into prothorax, frons with shallow, indistinct triangular postclypeal depression, only in the middle of frons more distinct, vertex convex, longitudinally grooved. Frons bronze with green tinge, vertex bronze. Structure of frons consist of polygonal cells with central grains, most of them with short, white setae growing from central grain. Eyes large, reniform, slightly projecting beyond outline of head, inner margin slightly S-shaped, narrower in vertex. Antennae serrate, green, rather short, reaching half of lateral pronotal margins, when laid alongsaid. Scape long, about 3 times as long as wide, claviform; pedicel oval, 1.6 times as long as wide; third antennomere claviform, twice as long as wide; fourth antennomere is triangular, about 1.5 as long as wide; antennomeres 5-10 trapezoidal, terminal antennomere rhomboid (almost oval) tip brown; apex of trapezoidal antennomeres brown.

Pronotum weakly convex, 1.6 times as wide as long, with wide, deep lateroposterior depressions, lateral margins angulately rounded. Maximum pronotal width at posterior third, anterior and posterior margins bisinuous. Sculpture of pronotum homogeneous, consisting of polygonal cells with central grains, most of them with short, white setae growing from central grain. Scutellum flat, cordiform, 0.8 times as long as wide, microscultpured, with very fine wrinkles, posterior margins almost rounded.

Elytra 2.1 as long as wide, bronze (only humeral callosities and transverse, basal depression are reddish), almost parallel-sided in anterior half, posterior half tapering, apices narrowly, separately rounded, very finely laterally serrate. Transverse, basal depression is deep, from anterior margin of humeral callosities to scutellum, elytral surface with reddish tinge in this depression. Each elytron depressed along lateral margin, depression is reaching half of elytron in the middle, narrowing toward anterior and posterior margin. In posterior fourth depression is also present along suture.

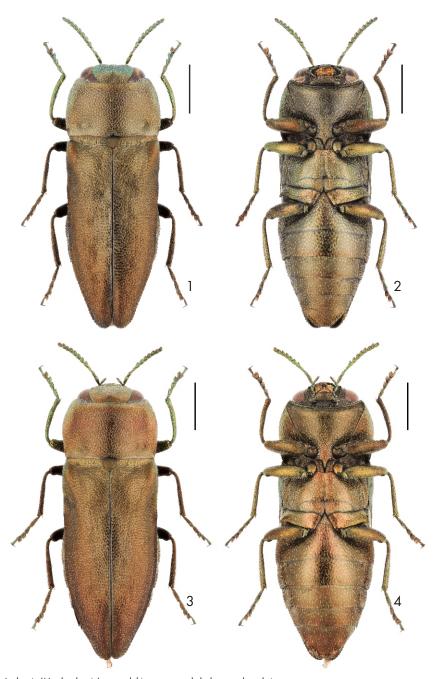


Fig. 1. Anthaxia (Haplanthaxia) svatopluki sp. nov.: male holotype, dorsal view. Fig. 2. Anthaxia (Haplanthaxia) svatopluki sp. nov.: male holotype, ventral view. Fig. 3. Anthaxia (Haplanthaxia) svatopluki sp. nov.: female paratype, dorsal view. Fig. 4. Anthaxia (Haplanthaxia) svatopluki sp. nov.: female paratype, ventral view.



Fig. 5. Anthaxia (Haplanthaxia) svatopluki sp. nov.: aedeagus.

- Fig. 6. Anthaxia (Haplanthaxia) agilis Obenberger, 1958: male lectotype, dorsal view.
- Fig. 7. Anthaxia (Haplanthaxia) agilis Obenberger, 1958: female, dorsal view.

Fig. 8. Anthaxia (Haplanthaxia) agilis Obenberger, 1958: aedeagus.

Ventral surface lustrous, bronze. Whole surface consist of polygonal cells with central grains, most of them with white setae (longer than setae on dorsal side) growing from central grain. Prosternum dark bronze, ventral side of pronotum bronze with green tinge on lateral margins. Mesosternum and metasternum bronze with very slight green tinge. Metacoxae bronze with green tinge, with lateroposterior angles acutely protruded. Sternites very finely serrated on lateral margins, last sternite obtusely rounded, with preapical, "w" shaped depression.

Legs thin, rather long, partly covered with long, white setae. Protibiae and tarsi green, adhesive pads and tarsal claws brown, mesotibiae and metatibiae bronze, tarsi bronze, adhesive pads and tarsal claws brown. All tibiae finely serrated on inner margins.

Aedeagus (Fig. 5) widely spindle shaped, flat, apex with long setae, median lobe tapering, apex pointed.

**Measurements.** Length: 4.2 - 5.7 mm (holotype 5.4 mm), width: 1.2 - 2.1 mm (holotype: 1.9 mm).

**Sexual dimorphism.** Female differs from male by bronze frons, non-serrate inner margins of tibiae and by widely notched anal sternite. (Figs. 3, 4).

**Differential diagnosis.** The closest species is *Anthaxia* (*Haplanthaxia*) *agilis* Obenberger, 1958 (Figs. 6, 7, 8) from China, Laos, Thailand and Vietnam. *A. agilis* is smaller (3.4 – 4.7 mm), shorter (elytra 1.9 times longer than wide), dark purple-bronze, *A. svatopluki* sp. nov. is larger and longer (4.2 – 5.7 mm, elytra 2.1 times longer than wide), brown-bronze. Male of *A. agilis* has brightly green frons with distinct triangular depression from the middle of frons almost

reaching clypeus (less distinct in female), A. svatopluki sp. nov. has frons only shallowly depressed in both sexes, in male frons with slight green tinge. Mesotibiae and metatibiae in male of A. agilis are without any serration, in male of A. svatopluki sp. nov. are serrated. They also can be distinguished by different aedeagi (Figs. 5, 8).

**Bionomics.** Host plant unknown, specimens from Baolai were collected on the flowers of *Melia azedarach* (Meliaceae) by sweeping nets, they were mixed with *Anthaxia* (Haplanthaxia) aeneocuprea Kerremans, 1913 and *Anthaxia* (Haplanthaxia) erato Bílý, 1989.

#### **Distribution.** Taiwan.

**Etymology.** This species is dedicated to our deceased colleague, mentor and friend, great expert in Buprestidae, Svatopluk Bílý (1945 – 2022). Rest in peace, our friend.

ACKNOWLEDGEMENTS. We would like to thank František Kovařík (Praha) and Daniel Rydzi (Beroun) for help with capturing color images, Petr Viktora (Kutná Hora) for composing of color plates and Chiamu Chen (Tainan City) for providing us with his specimen. We would also like to thank Martin Fikáček and Lukáš Sekerka (NMPC) for technical help with transport of specimens and finding type specimens of A. agilis.

#### **REFERENCES**

Bítý S. 2015: A revision of the Anthaxia (Haplanthaxia) aeneocuprea species-group (Coleoptera: Buprestidae: Anthaxiini). Folia Heyrovskyana, Supplementum 14: 1-96.

Bítý S. 2020: A new species of the Anthaxia (Haplanthaxia) aeneocuprea species-group from Taiwan (Coleoptera: Buprestidae: Anthaxiini). Folia Heyrovskyana, Series A 28(1): 1-4.

OBENBERGER J. 1958: Buprestides, Trouves par l'expedition chino-sovietique 1955 en Chine meridionale (Col. Buprestidae). Acta Societatis Entomologicae Cechosloveniae 55: 223-243.

Published: 28. 10. 2022