

*Anthaxia (Haplanthaxia) krali* sp. nov.  
(Coleoptera: Buprestidae) from China

Svatopluk BÍLÝ<sup>1)</sup> & Vítězslav KUBÁŇ<sup>2)</sup>

<sup>1)</sup> Czech University of Life Sciences, Faculty of Forestry and Wood Sciences, Department of Forest Protection and Entomology, Kamýcká 1176, CZ-165 21, Praha 6 – Suchbátka, Czech Republic; e-mail: svatopluk\_bily@nm.cz

<sup>2)</sup> Department of Entomology, National Museum, Kunratická 1, CZ-148 00 Praha 4, Czech Republic; e-mail: vkuban@nm.cz

**Abstract.** *Anthaxia (Haplanthaxia) krali* sp. nov., belonging to the *A. (H.) proteus* Saunders, 1873 species-group (Coleoptera: Buprestidae: Buprestinae: Anthaxiini), is described from China (Sichuan). The new species is fully described, illustrated and compared with the most similar species of the group.

**Key words.** Coleoptera, Buprestidae, Buprestinae, Anthaxiini, taxonomy, new species, China

### Introduction

The *Anthaxia (Haplanthaxia) proteus* Saunders, 1873 species-group was defined by BÍLÝ (1993) and further species were described and the definition of the species-group was refined by BÍLÝ (1996), BÍLÝ & SVOBODA (2001) and BÍLÝ & KUBÁŇ (2009). Nineteen species and 3 subspecies of this species-group (BELLAMY 2008) are distributed in the easternmost part of the Palaearctic Region (south-eastern provinces of Russia, central and eastern China, Korean Peninsula, Japan) and north-eastern part of the Oriental Region (Taiwan, Ryukyu Islands and Laos). Another new species of this group was recently collected in the Chinese province of Sichuan and it is described below.

### Material and methods

A Canon D-550 digital camera with attached Canon MP-E65mm f/2.8 1–5× macro lens was used to capture the colour images. Data from the locality labels are cited ‘verbatim’.

## Taxonomy

### *Anthaxia (Haplanthaxia) krali* sp. nov.

(Figs 1, 2, 4, 6–8)

**Type locality.** China, western Sichuan, Danba env., Suopo village, 30°51'N 101°55'E, 1900 m a.s.l.

**Type material.** HOLOTYPE: ♂, 'China, W Sichuan, 16–18.vii. Danba env., SUOPO vill. 30°51'N 101°55'E, 1900–2400m, David Král lgt., 2012' [printed] and 'HOLOTYPE *Anthaxia (Haplanthaxia) krali* sp. nov. S. Bílý & V. Kubáň det. 2013' [red label, printed]. ALLOTYPE (♀) and PARATYPES (7 ♂♂): the same data as holotype, only identification label with ALLOTYPE or PARATYPE, respectively. Deposited in the collection of the National Museum, Prague, Czech Republic.

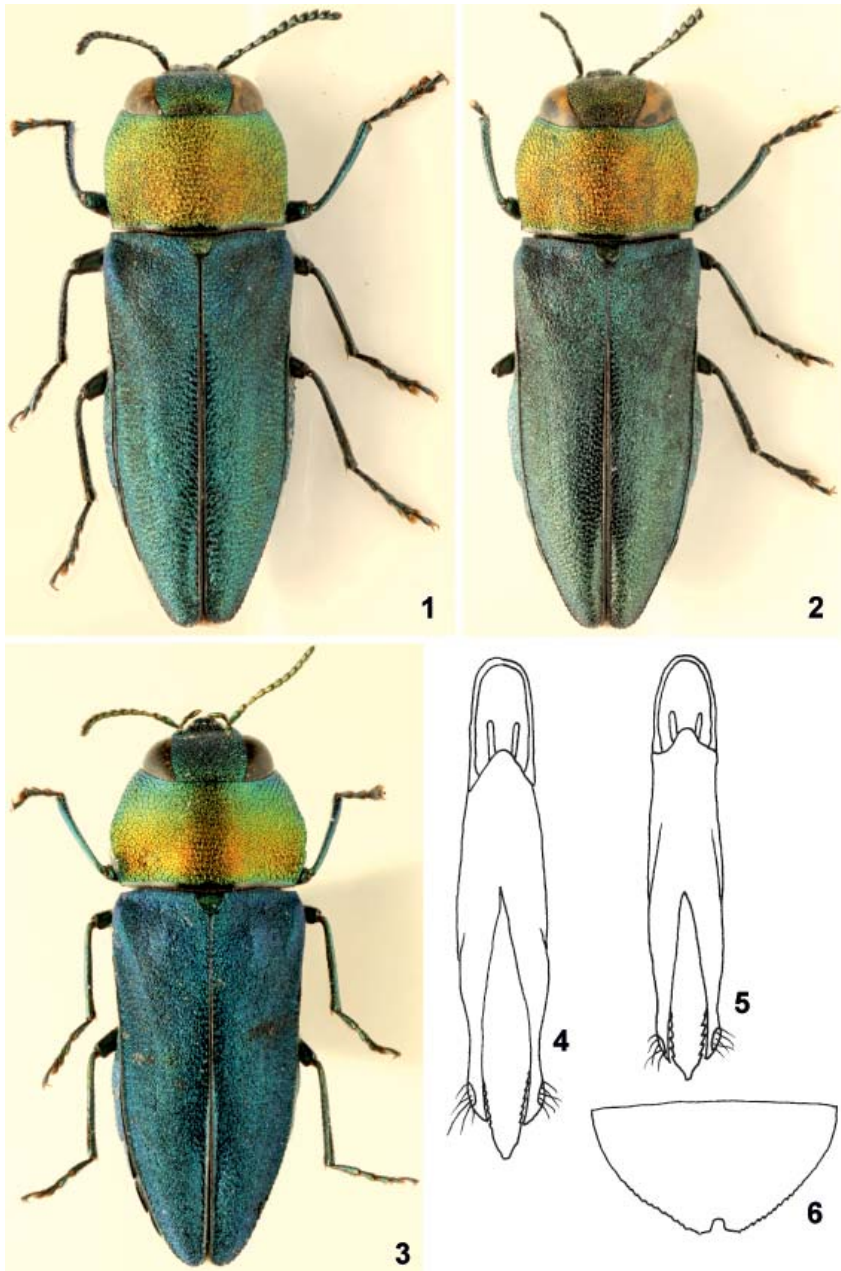
**Diagnosis.** Medium-sized (4.3–5.0 mm), rather convex, matt with silky lustre; dorsal surface bicolorous (Figs 1, 2): pronotum golden-orange, anterior margin with green tinge, elytra green with blue tinge and distinct mirror-effect along posterior two thirds of elytral suture; antennae and legs green; frons green (male) or frons dark orange-green (female); vertex darkened in both sexes; entire dorsal surface asetose; ventral surface dark golden green with extremely fine, sparse, recumbent, white pubescence; prosternal process of male with semierect, cream-white pubescence.

**Description of the male holotype** (Fig. 1). Head small, partly retracted into prothorax, narrower than anterior pronotal margin; clypeus with shallowly emarginate anterior margin, separated from frons by shallow, transverse depression; frons flat, slightly depressed posteriad of clypeus, vertex slightly convex, 0.8 times as wide as width of eye; eyes relatively small, reniform, not projecting beyond outline of head; sculpture of head rather homogeneous, consisting of small, well defined, very dense, polygonal cells with well developed central grains; antennae rather short, hardly reaching midlength of lateral pronotal margins when laid alongside; scape pyriform, 2.5 times as long as wide, pedicel ovoid, 1.5 times as long as wide; antennomere 3 subcylindrical, twice as long as wide, slightly widened apically; antennomere 4 triangular, slightly longer than wide; antennomeres 5–10 trapezoidal, about as long as wide; terminal antennomere rhomboid, slightly longer than wide.

Pronotum convex, twice as wide as long with very weakly developed lateroposterior depressions; anterior margin slightly biarcuate with weakly projecting medial lobe, posterior margin very slightly biarcuate, nearly straight; lateral margins regularly arcuate, nearly straight in front of posterior angles; maximum width at anterior third, posterior angles obtuse; lateral carina very short, distinct only just in front of posterior angles; pronotal sculpture well defined on entire pronotum, consisting of small, dense, polygonal cells with well developed, flat, central grains. Scutellum flat, pentagonal, very slightly wider than long, microsculptured.

Elytra regularly convex, 2.2 times as long as wide, nearly regularly tapering posteriorly, not completely covering abdomen; humeral swellings well-developed, basal, transverse depression deep, wide but not reaching scutellum; elytral epipleura well-developed, rather wide but not reaching tips of elytra; apical third of elytral margins very weakly, almost indistinctly serrate, each elytron rounded separately; elytral sculpture rather uniform, finely punctate-corrugate, sculpture of apical half finer than that on basal half.

Ventral surface lustrous, abdominal ventrites very finely ocellate with tiny central grains, pro- and metasternum rugose; anal ventrite obtusely truncate with very fine, lateral serration. Legs relatively long and slender, protibiae nearly straight, distal half of inner margins with



Figs 1–6. *Anthaxia* (*Haplanthaxia*) dorsal habitus (1–3), aedeagi (4–5) and anal ventrite (6). 1–2, 4, 6 – *A. (H.) králi* sp. nov., China, Sichuan: 1, 4 – holotype (♂), body length 4.3 mm; 2, 6 – allotype (♀), body length 4.8 mm. 3, 5 – *A. (H.) moya moya* Chûjô, 1970 (♂), length 3.7 mm, Japan, Ryukyu Islands, Iriomote Island, Uehara (National Museum, Prague, Czech Republic).



Figs 7–8. The type locality of *Anthaxia (Haplanthaxia) krali* sp. nov. 7 – China, Sichuan, the Dadu He river valley (altitude ca. 1900 m); 8 – the detail of the type locality with the shrubs of *Rosa* sp. on which some type specimens were collected on.



fine serrations; meso- and metatibiae straight, inner margin very slightly emarginate apically, somewhat widened and with 2–3 small spines just before apex. Tarsal claws very slender, hook-shaped, slightly enlarged at base.

Aedeagus (Fig. 4) well-sclerotised, straight, parameres widened at distal two thirds; median lobe pointed apically, without lateral serrations.

Ovipositor. Rather long, membranous with very small styli inserted close to each other, space between them slightly bilobate.

**Sexual dimorphism.** The only female (allotype) differs from the male slightly by the colouration (frons dark orange-green), somewhat robust body, unmodified tibiae and by the shape of the anal ventrite which is more triangular with the small but deep apical notch (Fig. 6).

**Measurements.** Length 4.3–5.0 mm (holotype 4.3 mm, allotype 4.8 mm), width 1.3–1.7 mm (holotype 1.4 mm, allotype 1.7 mm).

**Variability.** Except for the size and the sexual dichromatism (see above) almost no variability is apparent; only the golden-orange pronotal colouration is somewhat more intensive in two male paratypes.

**Differential diagnosis.** Although *Anthaxia (Haplanthaxia) krali* sp. nov. in habitus resembles the common European species, *A. (Anthaxia) nitidula* (Linnaeus, 1758), it belongs to the subgenus *Haplanthaxia* Reitter, 1911, sharing the principal diagnostic characters of the subgenus (regularly tapering elytra not covering completely the lateral sides of the abdomen, distinctly emarginate posthumeral portion of elytral margins and notched anal ventrite of female – see also BÍLÝ (2012) and BÍLÝ & KUBÁŇ (2012)). It belongs to the *A. (H.) proteus* species-group as defined by BÍLÝ (1993) and surprisingly it is most similar and probably related to the species distributed in the southernmost part of the distribution area of the species-group (Ryukyu Isladns). *Anthaxia (H.) krali* sp. nov. is very similar to *A. (H.) moya* Chûjô, 1970 from which it differs by the characters given in the Table 1. Both subspecies – *A. (H.) moya moya* (Fig. 3) and *A. (H.) moya ihanatumi* Chûjô, 1970 – are found on the different islands of the Ryukyu Archipelago (Iriomote, Ishigaki and Okinawa Islands) and they are nearly identical differing to each other only slightly by the colouration – see also BÍLÝ (1993).

**Etymology.** This species is named after the collector of the type specimens, David Král, the Czech specialist in the taxonomy of Scarabaeoidea.

Table 1. Differences between *Anthaxia (Haplanthaxia) krali* sp. nov. and *A. (H.) moya* Chûjô, 1970.

|                      | <i>Anthaxia (H.) krali</i> sp. nov.                                                                       | <i>Anthaxia (H.) moya</i>                                                                |
|----------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| size                 | 4.3–5.0 mm                                                                                                | 3.4–4.3 mm                                                                               |
| pronotal colouration | golden-orange, anterior margin with green tinge (Figs 1, 2)                                               | golden-orange, anterior fourth green (Fig. 3)                                            |
| pronotum             | maximum width at anterior third, lateral margins nearly straight in front of posterior angles (Figs 1, 2) | maximum width at midlength, lateral margins arched in front of posterior angles (Fig. 3) |
| male protibia        | distal half of inner margin with fine serrations                                                          | unarmed                                                                                  |
| aedeagus             | robust, parameres widened at distal two thirds (Fig. 4)                                                   | slender, parameres only weakly widened (Fig. 5)                                          |

**Collecting circumstances.** All specimens were collected on the flowers of *Rosa* sp. (Rosaceae) shrub at the edge of a pasture with a sandy soil near the Dadu He river (altitude ca. 1900 m) on a sunny morning (D. Král, pers. comm.) (Figs 7–8).

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