

## A new species of *Chrysina* Kirby (Coleoptera: Scarabaeidae: Rutelinae) of the *quiche* group

Svatopluk POKORNÝ<sup>1)</sup> & Daniel. J. CUROE<sup>2)</sup>

<sup>1)</sup>Krupská 12, CZ-100 00 Praha 10, Czech Republic; pokornys@upcmail.cz

<sup>2)</sup>Schiller 524, Mexico D.F. 11580, Mexico; curoe@hotmail.com

**Abstract.** *Chrysina benesi* sp. n. from Chiapas, Mexico, is described, illustrated and compared with other members of the *quiche* group.

**Key words.** Rutelinae, *Chrysina* Kirby, new species, Mexico, Chiapas.

### Introduction

Material from light traps set in late May 2012 in the mountains of the state of Chiapas near the town of Motozintla contained 20 specimens of *Chrysina* that we at first regarded as *Chrysina quiche* Morón, because their external morphology closely resembled that species and its type locality is relatively close to the Guatemala border. However, after extracting the genitalia we realized that our specimens represent a new species of the *quiche* group (sensu Hawks 2001), which is described and compared in this paper.

### Taxonomy

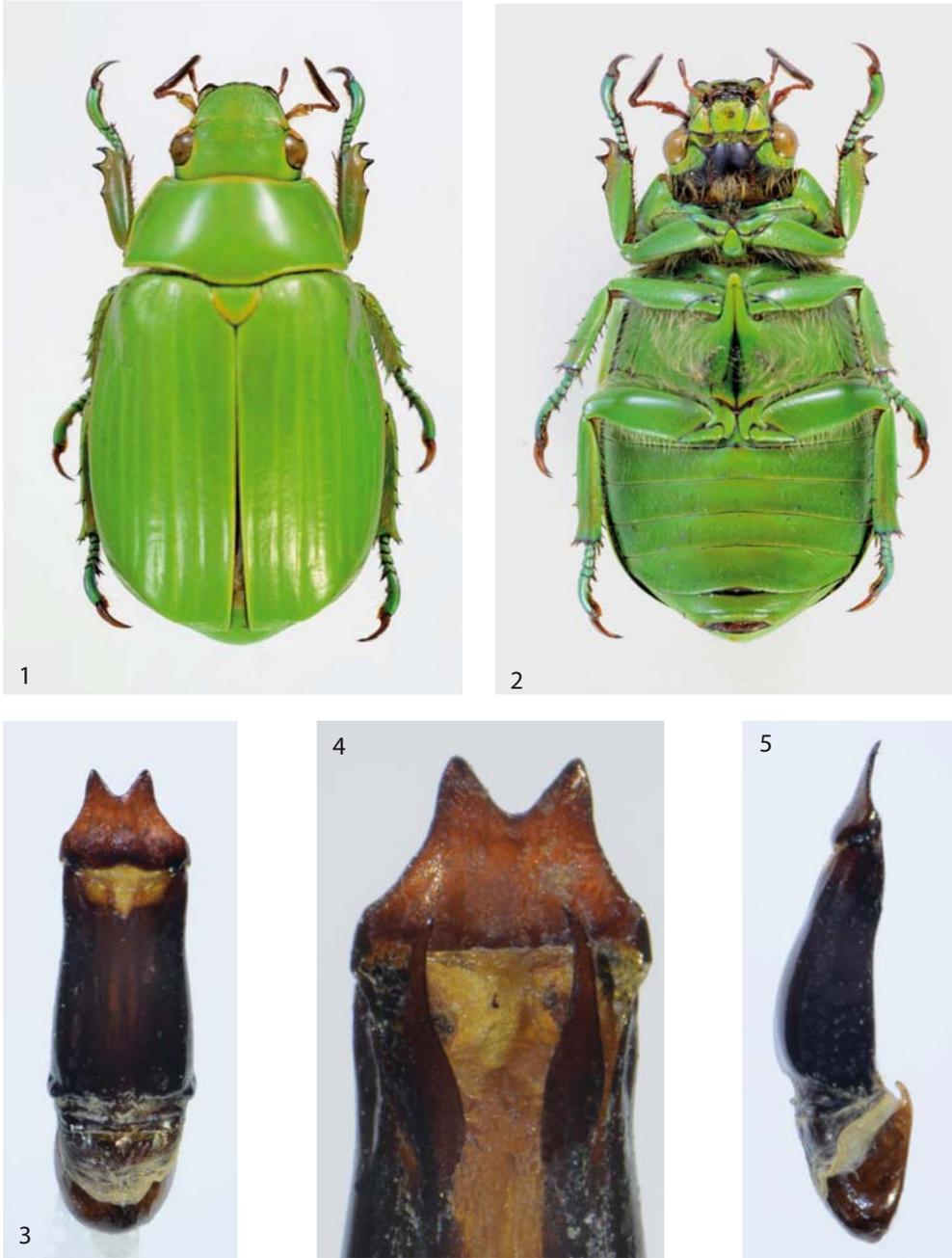
#### *Chrysina benesi* sp. n.

(Figs. 1-9)

**Type material.** Holotype male (deposited at National Museum, Prague, Czech Republic) labeled "Mexico, Chiapas, Motozintla env., 28.-29.5.2012, Benes + Pokorny lgt". Allotype female (deposited at National Museum, Prague, Czech Republic) labeled as holotype. Paratypes (18 males) labeled as holotype, deposited at The Natural History Museum, London, UK and the private collections of M. A. Morón (Jalapa, Mexico), Daniel Curoe (Mexico D.F., Mexico), Wilhelmus Hilhorst (Sabran, France), Svatopluk Pokorný (Prague, Czech Republic) and Vladimír Beneš (Prague, Czech Republic).

**Description of holotype male.** Total length 25 mm, elytral width at humeri 12 mm, maximum elytral width 14 mm. Color: Dorsum light green with yellow reflections; margins of pronotum, scutellum and elytra with narrow orangish-yellow rim; terminal calli of elytrons light green; venter green including femora and tibiae, only mesomesometasternal process with golden sheen; upper sides of tibiae greenish brown, tarsi light green and glossy.

Clypeus parabolical, in front slightly emarginate, sparsely covered by large, shallow punctures. Fronto-clypeal suture medially broadly interrupted, frons punctured similarly to clypeus. Density of punctures diminishes toward occiput, which is nearly smooth. Antennal club slightly longer than antennomeres 2-7 combined.



**Figs. 1-5.** *Chrysina benesi* sp. n. **1)** Holotype male, dorsal view. **2)** Holotype male, ventral view. **3)** Male genitalia, dorsal view. **4)** Male genitalia, ventral view. **5)** Male genitalia, right lateral view.



**Figs. 6-9.** *Chrysina benesi* sp. n. **6)** Allotype female, dorsal view. **7)** Allotype female, ventral view. **8)** Female genital plate, dorsal view. **9)** Female genital plate, ventral view.

Pronotum distinctly margined except for broad antero- and posteromedian gaps; disc covered by small, sparse punctures which become larger and denser toward lateral margins.

Elytral striae shallow, marked by small, sparse punctures; interstriae nearly smooth, with sculpture barely recognizable.

Pygidium shallowly and sparsely punctured. Mesomesometasternal process relatively short, with a rounded apex. Hind margins of mesofemora and metasternum with conspicuous long, white hairs.

Parameres very short, fused, nearly symmetrical, with bidentate apex (Figs. 3-5).



**Figs. 10-12.** Male genitalia of members of the *quiche* group, dorsal view. **10)** *Chrysina quiche* (Morón). **11)** *Chrysina tecumani* (Cano & Morón). **12)** *Chrysina benesi* sp. n.



**Figs. 13-15.** Female genital plates of members of the *quiche* group, dorsal view. **13)** *Chrysina quiche* (Morón). **14)** *Chrysina tecumani* (Cano & Morón). **15)** *Chrysina benesi* sp. n.

**Description of allotype female.** Similar to holotype except: Total length 26 mm, elytral width at humeri 12 mm, maximum elytral width 14 mm. Terminal protarsomere somewhat more slender. Antennal club shorter than antennomeres 2-7 combined. Mesometasternal process longer and narrower. Pygidium more coarsely punctured.

Genital plates of anchor-like shape, typical of the *quiche* group (Figs. 8, 9).

**Variability of paratypes.** The series is very uniform in color. Total length from 23 to 26 mm, elytral width at humeri from 11 to 12.5 mm, maximum elytral width from 12 to 14 mm.

**Etymology.** We are pleased to name the new species after the esteemed Czech neurosurgeon and amateur entomologist Vladimír Beneš, who together with one of us (SP) collected these beautiful beetles in the mountains of Chiapas.

**Diagnosis.** *Chrysina benesi* doubtless belongs to the *quiche* group, which currently includes *Chrysina quiche* (Morón) and *Chrysina tecunumani* (Cano & Morón). All three species are very difficult to differentiate on external morphology, but become unequivocally separable upon extraction and comparison of male (Figs.10-12) and female (Figs.13-15) genitalia.

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