New species of the genus *Geodromicus* Redtenbacher, 1857 (Coleoptera: Staphylinidae: Omaliinae) from Jiangxi Province, China

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*Geodromicus lucidus* sp.n. from Jiangxi Province of China is described and illustrated.

Key words: taxonomy, new species, Staphylinidae, Omaliinae, *Geodromicus*, China.

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**INTRODUCTION**

Taxonomic knowledge of the *Geodromicus* Redtenbacher, 1857 species occurring in China is extremely limited. To date, only twelve species and one subspecies have been recorded (Smetana, 2004; Rougemont & Schillhammer, 2010). Keys for specific identification are lacking and a taxonomic revision, based on the study of type material, is required.

In the present paper I describe a new species of *Geodromicus* with bright shiny metallic elytra from Jiangxi province, the second species of the genus from China with iridescent body.

The material examined is deposited in: NMPC – National Museum, Prague, Czech Republic (M. Fikáček, J. Hájek); CS – private collection of A.V. Shavrin, Daugavpils, Latvia.

**METHODS**

Both geographical and ecological labels are separated by “,”, different lines in labels are separated by “|”, necessary notes within the label are shown in square brackets. Morphological studies were carried out using Zeiss Discovery V8 and V12 stereomicroscopes. A digital camera (Sony Alpha DSLR-A300) was used for photographs and all figures were enhanced using Adobe Photoshop software. All measurements of the entire lengths of the beetles are given in millimeters. Measurements of body parts were made with a stereoscopic microscope using an ocular micrometer.

*Geodromicus lucidus* sp.n.

(Figs. 1–5)

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[26°36.8’N, 114°11.1’E, 800 m] [M.] Fikáček, [J.] Hájek & [V.] Kubeček’, ‘at the wet rocks in the bed of a drying-up stream [slightly covered with algae]’ (see Fig. 2) (NMPC).

Paratypes: 2 males: same data as the holotype (NMPC, CS).

Description. Measurements in mm (n=3). Maximum width of head including eyes: 0.8”0.9; length of head (from base of labrum to neck constriction along midline): 0.44”0.54; length of antenna: 2.5”2.6; longitudinal length of eye: 0.16”0.24; length of temple (from posterior margin of eye to neck constriction): 0.12”0.14; length of pronotum: 0.76”0.9; maximum width of pronotum: 0.88”1.06; minimum width of pronotum: 0.62”0.8; sutural length of elytra (from apex of scutellum to posterior margin of sutural angle): 1.36”1.5; maximum width of elytra: 1.36”1.5; width of abdominal segment IV: 1.3”1.44; length of aedeagus: 0.8”0.84; total length (from base of labrum to apex of abdomen): 4.9”5.6.

Habitus as in Fig. 1. Body, first and sometimes third antennomeres, tibia and apex of femora black with bluish and greenish metallic brilliance; antennomeres 2”11 (or 2, 4”11), mouthparts, apical margins of abdominal tergites, bases of femora and tarsi brown; palpi at apices and tarsal claws yellow. Each elytron with goldish metallic reflection extending from scutellum along suture, gradually expanding posteriorly; in posterior third of elytra, goldish reflection overlapping with bluish metallic reflection, along elytral suture and reaches posterior margins of elytra. Pubescence of head, pronotum and elytra white, decumbent; pubescence of abdomen shorter, denser and longer on lateral parts of tergites.

Head large, slightly transverse (approximately twice as wide as long), with large prominent eyes; eyes 1.3”1.7 times longer than temples; anteocular depressions relatively deep; ocelli well visible, distance between ocelli as long as the distance between ocellus and posterior margin of eye. Punctuation deep, coarse and subrugose; clypeus impunctate, glossy. Antennae long, reaching 1/3 length of elytra; antennomere II slightly shorter than antennomere III; length/width of antennomeres: I: 0.28 × 0.1; II: 0.16 × 0.08; III”VI: 0.18 × 0.08; VII”X: 0.18 × 0.1; XI: 0.3 × 0.1.

Pronotum small, convex, slightly wider than head, 1.1 times as wide as long, widest at middle, with broad longitudinal impression and oval deep transverse impression at base; punctuation denser than that on head, subrugose, evenly distributed and deep; interstices between punctures without microsculpture, glossy.

Scutellum triangular, without microsculpture, glossy.

Elytra 1.6”1.7 times as long as pronotum, slightly convex and weakly broadened distally, with wide longitudinal impressions along suture and significant impressions at sides; punctuation regular, punctures larger and deeper than those on pronotum; interstices between punctures without microsculpture. Wings fully developed.

Abdomen convex, slightly narrower than elytra; abdominal tergites with fine punctuation and with distinct isodiamic microsculpture; tergite IV with paired tomentose patches.

Male. Abdominal tergite VIII strongly narrowed toward apex, with indistinctly rounded emargination, sternite VIII with wide emargination. Aedeagus (Fig. 3–5) long and narrow, median lobe abruptly tapered from apical third towards apex; endophallus with long flagellum forming a spiral in basal part; parameres wide and long, extending beyond apex of aedeagus, with three or four setae on apices and with small seta on ventral surface (Fig. 5), which can be broken off (Fig. 3). Aedeagus laterally as in Fig. 4.

Female unknown.

Comparative notes. Based on the elytral impressions, by the presence of iridescent elytral maculae and the type of aedeagus, G. lucidus is closely related to G. cupreostigma Rougemont & Schillhammer, 2010 (China: Shaanxi Province,

Figs. 1–2. *Geodromicus lucidus*: 1—habitus, 2 – type locality. Scale bar: 1: 2.0 mm.

Figs. 3–5. *Geodromicus lucidus*: 3, 5—*aedeagus*, ventral view (3 – holotype, 5 “ paratype), 4—*aedeagus*, lateral view (holotype). Scale bar: 0.1 mm.
Qinling Shan), from which it differs by the wider head and longer temples, the differently shaped pronotum (widest part of pronotum of G. lucidus in the middle, of G. cupreostigma in anterior third of pronotum), coloration (G. cupreostigma slightly darker, with greenish metallic reflection, each elytron with reddish metallic macula on posterior margin) and shape of aedeagus (median lobe of G. lucidus sp.n. wider, apical narrowing more abrupt, paramerae narrower and weakly curved apically, apical setae very short).

**Etymology.** The name derives from Latin adjective (lucidus, a, um [lux]) meaning “clear, bright, shining, full of light”, and alludes to the shiny metallic elytra of new species.

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**REFERENCES**
