

## A new species of *Glycosia* Schoch, 1896 from South Vietnam (Coleoptera: Scarabaeidae: Cetoniinae)

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**Abstract.** *Glycosia phoenix* sp. nov. is described from the southern part of Vietnam. The newly described species is compared with its congeners in the *Glycosia luctifera* Schoch, 1896 species group distributed in China, Taiwan, northern parts of Laos, Thailand, Myanmar, northeastern India and Bhutan. This remarkable finding extends the distribution of the *G. luctifera* species group from the transitional zone between Palearctic and Oriental regions far to the south.

### INTRODUCTION

The genus *Glycosia* was established by Schoch in 1896 for his new species *Glycosia plagiata* Schoch, 1896, which was synonymised by Miksic (1982) with *Cetonia tricolor* Gory & Percheron, 1833. Most of *Glycosia* species are very rarely collected, usually only few specimens of each species exist. The genus was never seriously revised, but currently we recognise 17 species and 12 subspecies. Species flying in Indonesia and Philippines are better known and their identification seems to be easier compared to species distributed in continental Asia. Two species groups (the *Glycosia tricolor* Gory & Percheron species group and the *Glycosia luctifera* Fairmaire, 1878 species group) occur in the continent, starting from the Indian subcontinent (including Sri Lanka) encompassing transitional zones between Palaearctic and Oriental Regions of China (including Taiwan), Nepal, Bhutan, Myanmar, Thailand, Laos and Vietnam. Specimens of *Glycosia tricolor* Gory & Percheron are much more often represented in collections compared to very rarely collected *Glycosia luctifera* Fairmaire. Several taxa on subspecies level are described in both species. In authors opinion at least part of them should be raised to species level in possible future revision of the genus. Although male aedeagi are rather uniformly structured, other characters (shape of mesometasternal process, structure of protibia, lateral border in elytra, dorsal and ventral pattern of ornament etc.) are diagnostic.

Interesting specimen from the *Glycosia luctifera* species group was collected far to the south of the currently known distribution of *Glycosia luctifera* Fairmaire, 1878, in the southern part of Vietnam. *Glycosia luctifera* Fairmaire is described from central China and its three currently recognised subspecies are distributed from Nepal, northeastern India and Bhutan, across northern parts of Myanmar, Thailand, Laos and Vietnam to south of China and Taiwan. The insect from Lam Dong Province in southern part of Vietnam was compared with *G. luctifera* Fairmaire and its currently recognised subspecies. This comparison revealed

that species is new to science and can be accommodated in the *luctifera* species group. Its description and differential diagnosis with its congeners is given in the taxonomical part of the present article.

## MATERIAL AND METHODS

The following codens of institutional and private collections are used in the text:

MNHN Museum National d'Histoire Naturelle, Paris, France;

SJCP Stanislav Jákl, private collection, Praha, Czech Republic.

The specimen of newly described species is provided with red printed label for HOLOTYPE. Holotype is provided with sex symbol and words St. Jákl det. 2020. Label data are cited for the material examined, individual lines are indicated by a single slash (/).

## TAXONOMY

### *Glycosia phoenix* sp. nov.

(Figs. 1-5)

**Type locality.** South Vietnam, Lam Dong Province, Di Linh.

**Type material.** Holotype (♂) labelled: S VIETNAM/ Lam Dong Prov./ Di Linh, IV. 2020/ local collector leg., (SJCP).

**Description of holotype.** Body black with cover blackish tomentum. Posterior elytral half with numerous whitish maculae. Pronotum red with black disc. Body size 22.5 mm (excluding pygidium).

**Head.** Black, shining, basalic tomentum absent. Shape approximately parallel-sided, lateral declivities clearly visible. In level of eye canthus with nearly transversally running groove on each side. Punctuation simple, moderately dense, most of punctures diameters circularly shaped. Punctures in clypeus distinctly smaller than in frons. Disc of clypeus and frons nearly impunctate. Apical clypeal margin deeply incised. Antennae short, length of stalk and pedicle approximately same. Antennal stalk black, pedicle brownish.

**Pronotum.** Red with black pronotal disc and one blackish macula beside each side, approximately at its half of length. Anterior and posterior margins darkened. Lateral border not developed. Punctuation very fine and sparse. Pattern of white ornament and setation absent.

**Scutellum.** Black, opaque, impunctate and immaculate.

**Elytra.** Black, completely covered with blackish tomentum. Posterior half with small, white, more or less transversally elongate, short maculae. Anterior half of elytra immaculate. Disc of each elytron with two obtuse ribs. Posterior half of elytral disc with few fragmentally developed, longitudinally running striolate lines. Punctuation fine and sparse, slightly more developed in elytral apex. Subhumeral emargination moderately sharp. Humeral calli flattened, apical calli more distinct. Lateral border not reaching level of apical calli. Sutural ridge broad, impunctate, obtusely elevated nearly throughout total length, its termination

rather sharply drawn out over elytral apex.

Pygidium. Black, with two large, red maculae and three, white patches of ornament, two placed in pygidial sides, one in middle of apical margin. Setation not developed.

Ventrum. Black with red mesepimeron and red sides of prosternum. Abdomen flat, shining, abdominal impression not developed. Abdominal segments 2nd-5th with white patch of ornament in both sides. Abdominal disc nearly impunctate, sides with few horse-shoe shaped punctures in each ventrite (excluding anal ventrite). Punctuation of metasternum denser and deeper, most of punctures semihorse-shoe shaped. Posterolateral margins of metasternum with one tiny, white patch. Apex of mesometasternal process robust, protruding over level of mesocoxae and heading slightly downwards. Rather long, white to yellow setation present mainly in metasternum and part of prosternum.

Legs. Moderately long, femora, tibia and tarsi black. Posterior margins of femora and inner sides of meso- and metatibia with white to yellowish setation. Protibia tridentate, teeth equidistant, posterior tooth small and rather obtuse. Meso- and metatibia with carina in posterior half of length. Tibial terminal spurs moderately long and rather sharp.

Genitalia. Similarly developed as in other representatives in continental Asia (Figs. 4-5).

**Variability and sexual dimorphism.** Hitherto only holotype male is known.

**Differential diagnosis.** The newly described species differs from *Glycosia luctifera* Fairmaire, 1878; *Glycosia luctifera lousiae* Fairmaire, 1888; *Glycosia luctifera doubleti* Pouillaude, 1914; *Glycosia luctifera dureli* Pouillaude, 1914 and *Glycosia nigra* Kometani, 1940 (currently synonym of *G. luctifera dureli* Pouillaude, 1914) by a complex of the following characters: I. Pronotum red with black disc, but black with reddish sides or completely black in its congeners; II. Pronotal sides without border, but bordered in its congeners (excepting *Glycosia luctifera dureli* Pouillaude, 1914); III. Pronotum and basal half of elytra immaculate, but with numerous white maculae in its congeners (excepting *Glycosia luctifera dureli* Pouillaude, 1914); IV. Elytral sides without square-shaped patch, present in all its congeners (excepting some specimens of *Glycosia nigra* Kometani, 1940); V. Border of elytral sides not reaching level of apical calli, but at least fragmentally reaching level of apical calli in all its congeners; VI. Protibia in males tridentate, but bidentate in its congeners (excepting *Glycosia luctifera dureli* Pouillaude, 1914; VII. Mesometasternal process robustly developed, in profile view mesometasternal apex square-like terminated, but without square-shaped apex of mesometasternal process (in profile view) in its congeners.

**Note.** The author was not able to examine *Glycosia mawenzhena* Krajčič, 2011 from Xizang, but according to the original description, the species seems to stay close to *Glycosia luctifera* Fairmaire, 1878.

**Etymology.** The name of newly described species refers to its fiery colour of the part of body.

**Distribution.** South Vietnam, Lam Dong Province, Di Linh.



Figs. 1-5. *Glycosia phoenix* sp. nov.: 1- habitus, dorsal aspect; 2- habitus, ventral aspect; 3- habitus, lateral aspect; 4- aedeagus; 5- aedeagus, lateral aspect.

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