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New species of *Phygasia* Dejean 1837 from Indochina (Coleoptera: Chrysomelidae: Alticinae)

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ABSTRACT. Four new species of the genus *Phygasia* are described: *Ph. warchalowskii* n.sp. from Thailand, *Ph. bicoloripes* n.sp. from Laos, *Ph. vietnamica* n.sp. and *Ph. pallida* n. sp. from Vietnam. A key to all Indochinese species is given.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Alticinae, *Phygasia*, Indochina, key.

INTRODUCTION

A comparatively small Oriental genus *Phygasia*, with most species distributed on continent, are rather well studied in last years (SCHERER 1969; MEDVEDEV 1995, KIMOTO 2000). However during preparing a revision of Indochinese Alticinae I have found 4 new species from this region, which are described below.

Males of this genus usually have thickened intermediate segments of antennae and in most cases differ in aedeagus form. Females mostly have lateral ridges on the sides of elytra. I investigated also the spermatheca of two newly described species and found that this character might be useful for dividing females of this genus

All type specimens are deposited in author's collection (LM).

DESCRIPTIONS OF NEW TAXA

Phygasia warchalowskii n. sp.

ETYMOLOGY

I dedicate this species to my friend, Prof. Andrzej Warchałowski, eminent specialist on Chrysomelidae with special interest in the Palearctic fauna and Oriental Alticinae.

DIAGNOSIS

This is a single species of the genus having flavous elytra with black apex. Morphologically it is very near to *Ph. pallidipennis* L. Medvedev 2004 from Laos, having entirely fulvous elytra.

DESCRIPTION

Black, antennae dark fulvous with 3 basal segments more light, elytra pale flavous with black apical third, anterior half of head except labrum fulvous.

Head impunctate, interantennal space with sharp ridge, clypeus short, frontal tubercles triangular, sharply delimited, with acute anterior angles. Antennae nitidiform, reach anterior third of elytra, with segment 3 twice as long as 2. Prothorax 1.6 times as wide as long, sides distinctly rounded and slightly incised before base, maximal width just before middle, surface shining, indistinctly punctuate, transverse basal groove deep, feebly delimited on sides. Scutellum triangular with rounded apex. Elytra 1.35 times as long as wide, with very feeble ridge on sides, surface shining, finely and densely punctuate. Spermatheca S-like (fig. 8). Length of body 5.0 mm.

Type material

Holotype (female): THAILAND, Khao Sok, I. 1996, leg. M. Mostovsky (LM).

Phygasia vietnamica n. sp.

ETYMOLOGY

Named after its terra typica.

Diagnosis

A new species is very near morphologically to *Ph. indochinensis* L. Medvedev 1995 from Thailand and Laos, that has a different antennal colour, different elytral pattern and thick aedeagus without longitudinal concavity ventrally.

DESCRIPTION

Black including legs, two basal antennal segments more or less reddish beneath, elytra flavous with basal third and apical quarter black as well as very narrow lateral margin and suture; apical black band produced anteriorly along suture.

Head impunctate, interantennal space ridged, frontal tubercles triangular. Antennae of male flattened and more or less widened, segments 8-11 more narrow, segment 3 almost 3 times as long as 2. Prothorax twice as wide as long, broadest in anterior third, surface shining, very sparsely and finely punctate. Elytra shining, densely punctate,

but not ridged on sides. First segment of anterior and middle tarsi widened in male. Aedeagus thin in lateral view, with acute triangular apex and longitudinal concavity on underside delimited with lateral ridges (fig. 1). Length of body 6.7 mm.

TYPE MATERIAL

Holotype (male): VIETNAM, Tam Dao, 900 m, 5. VI. 1981, leg. L. Medvedev (LM).

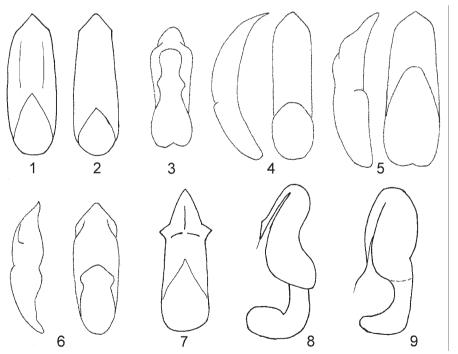
Phygasia bicoloripes n. sp.

ETYMOLOGY

Named after its bicoloured legs.

DIAGNOSIS

Near *Ph. indochinensis* L.Medvedev 1995 and *Ph. vietnamica* n. sp., differs from both in specific bicolor colour of legs, while both mentioned species have entirely black legs.



1-7. Aedeagus: 1– *Phygasia vietnamica* n. sp. ventral; 2 – *Phygasia pallida* n. sp., ventral; 3 – *Phygasia silacea* Illiger, ventral; 4 – *Phygasia ornata* Bally, lateral and ventral; 5 – *Phygasia dorsata* Bally, lateral and ventral; 6 – *Phygasia indochinensis* L. Medvedev, lateral and ventral; 7 – *Phygasia pallidipennis* L. Medvedev, ventral; 8, 9. Spermatheca: 8 - *Phygasia warchalowskii* n. sp., 9 - *Phygasia bicoloripes* n. sp.

DESCRIPTION

Black, antennae with underside of basal segment and segments 2 and 3 reddish, elytra pale fulvous with basal 1/5, narrow lateral margin, suture and apical 1/5 black, femora including trochanters flavous with black apices, tibiae and tarsi black Apical black part of elytra triangularly produced anteriorly along suture.

Head impunctate, interantennal space ridged, frontal tubercles triangular. Antennae almost nitidiform, with segments 4-8 feebly flattened and widened apically, segment 3 about twice as long as 2. Prothorax 1.6 times as wide as long, broadest before middle, sides feebly rounded, surface shining and practically impunctate, transverse basal groove sharply delimited on sides. Elytra 1.3 times as long as wide, densely punctuate, with well developed lateral ridge, more feeble behind middle but distinct to apical slope. Spermatheca hook-like (fig. 9). Length of body 5.2 mm.

Type material

Holotype (female): LAOS, Khammouang Prov., Ban Khounkham (Nahin), 18 13' N, 104 31' E, 200 m, 12. IV. 2005, leg. O. Gorbunov (LM).

Phygasia pallida n. sp.

ETYMOLOGY

Named after its entirely fulvous body.

DIAGNOSIS

Morphologically fully identical with *Ph. silacea* (ILLIGER, 1807) from India and Sri Lanka, but differs distinctly in form of aedeagus. In *Ph. silacea* ILLIGER aedeagus broad, not narrowed at base, slightly narrowed to more narrow and widely rounded apex, ventrally with longitudinal concavity; in lateral view aedeagus almost straight (fig. 3); also this species has antennae except basal segments, tibiae tarsi and hind femora distinctly darkened.

DESCRIPTION

Body entirely fulvous.

Head impunctate, frontal tubercles triangular, interantennal carina well developed. Antennae reach a little behind base of elytra, segment 3 almost twice as long as 2 and equal to 4, segments 4-11 equal, intermediate segments not widened. Prothorax 1,7 times as wide as long, surface smooth and impunctate. Elytra finely and minutely punctate. Aedeagus (fig. 2) moderately broad, distinctly narrowed at base and apex, which is short triangular; ventrally evenly convex, without any depressions, curved in lateral view. Length of body 3.8-4.3 mm.

Type material

Holotype (male): VIETNAM, Gia Lai Province, Son Lang, 40 km N Ankhe (= Buon Loi), 700 m, 2. XI. 1979, leg. L. Medvedev (LM).

Paratype: same locality, 25. XI – 4. XII. 1978, leg. L. Medvedev, 1 male (LM).

A KEY TO INDOCHINESE SPECIES

- 1(14) Elytra bicolor. Intermediate antennal segments thickened in male.
- 2(3) Prothorax fulvous or red. Elytra fulvous with basal and apical black or pitchy bands connected along suture and lateral margin with narrow dark stripe; extreme apex often red. Venter, femora and basal segments of antennae reddish fulvous. Aedeagus fig. 4. Length 4.0-6.5 mm. Vietnam, Thailand, India, Burma, South China, Taiwan, Malaya, Java.

Ph. ornata BALY, 1876

- 3(2) Prothorax black.
- 4(5) Elytra flavous with sutural stripe widening in middle into large common central spot and apices black. Other body parts black. Aedeagus fig. 5. Length 5.4-7.5 mm. Vietnam, Laos, Thailand, India, China, Sumatra.

Ph. dorsata BALY, 1878

- 5(4) Elytral suture without large common central spot.
- 6(11) Elytra with basal band and apex black.
- 7(10) Legs entirely black.
- 8(9) Antennae dark fulvous to dark pitchy. Basal band of elytra occupies a quarter of their length, lateral margin and suture not darkened in middle. Elytra of female not costate on sides. Aedeagus fig. 6. Length 5.2-6.0 mm. Laos, Thailand.

Ph. indochinensis L. Medvedev, 1995

9(8) Antennae black. Basal band of elytra occupies one third of their length, lateral margin and suture very narrowly black. Aedeagus – fig. 1. Length 6.7 mm. Female unknown, Vietnam.

Ph. vietnamica n. sp.

10(7) Femora fulvous with black apices. Basal band of elytra occupies a quarter of their length, lateral margin and suture very narrowly black. Antennae black. Elytra of female with sharp lateral ridge. Spermatheca – fig. 9. Length 5.3 mm. Male unknown. Laos.

Ph. bicoloripes n. sp.

- 11(6) Elytral pattern different, lateral margin and suture not darkened.
- 12(13) Basal 1/5 of elytra pitchy black. Antennae fulvous with several apical segments pitchy black. Legs pitchy black. Length 5.0-6.0 mm. Thailand.

Ph. basalis Kimoto, 2000

13(12) Apical third of elytra black. Antennae piceous with fulvous basal segments. Legs black with fulvous anterior femora. Elytra of female with feeble ridge. Spermatheca – fig. 8. Length 5.0 mm. Male unknown. Thailand.

Ph. warchalowskii n. sp.

- 14(1) Elytra entirely fulvous or pale flavous. Intermediate antennal segments of male not thickened.
- 15(16) Body black, anterior part of head, basal segments of antennae and femora (at least beneath) fulvous, elytra pale flavous. Aedeagus (fig. 7) with complicated

structure ventrally including central sharp ridge and lateral protuberances. Length 5.0-6.0 mm.

Ph. pallidipennis L.MEDVEDEV, 2004

16(15) Body entirely fulvous. Aedeagus – fig. 2. Length 3.8-4.3 mm. Female unknown. Vietnam.

Ph. pallida n. sp.

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