

## Description of two new species of the genus *Tambana* Moore, 1882 from China (Lepidoptera, Noctuidae, Pantheinae)

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**Abstract:** Two species of the genus *Tambana* (Lepidoptera: Noctuidae) from South West and Central China are described as new: *T. similina* **n. sp.** and *T. nekrasovi* **n. sp.** Differential diagnosis for the new species is given, imago and genitalia are illustrated. The taxonomic composition of the genus is considered. *T. arctoides* Speidel & Kononenko, 1998 is reported from China for the first time.

**Key words:** Lepidoptera, Noctuidae, Pantheinae, *Tambana*, China, North Yunnan, description, new species.

### Introduction

The pantheine genus *Tambana* is distributed mainly in the upper forest zone of montane regions of North India, Nepal, Indochina, South and Central China and Taiwan with center of specific diversity in northern Indochina and South China. Only one species, *T. plumbea* reach Japan, South Sakhalin and South Kurile Islands. The specific composition of *Tambana* in Vietnam has been considered by SPEIDEL & KONONENKO (1998), three new species have been described. After the description of the new species presented here, the genus comprises now 17 species, however there are several still undescribed species known from Indochina and China. The list of known species of *Tambana* is given below.

***Tambana* Moore, 1882**

In: HEWITSON & MOORE, 1882, Descr. lepid. Insects Colln. late Mr W. S. ATKINSON (2): 155 (Type species: *Tambana variegata* Moore, 1882, by original designation).

*Trisulipsa* Berio, 1973, Annali Mus. civ. Storia nat. Giacomo Doria, 79: 160 (Type species: *Trisulipsa quadrata* Berio, 1973 [a junior synonym to *Trisuloides bella* Mell, 1935], by original designation)

*Trisuloides* auct., nec Butler, 1881

*Tambana subflava* (Wileman, 1911) (N India, India, Assam, Nepal, Taiwan)

*Tambana albitesselata* (Hampson, 1913)

*Tambana succincta* Berio, 1973 (NE Myanmar, Vietnam, N Thailand)

*Tambana variegata* Moore, 1882 (India, Assam, N Myanmar, Butan, Nepal, N Vietnam, S China)

*Tambana albiplaga* (Warren, 1912) (N India, N Vietnam, N Thailand, S China)

*Tambana c-album* Leech, 1900 (W China: Chang-yang)

*Tambana similina* **n. sp.** (SW China)

*Tambana arctoides* Speidel & Kononenko, 1998 (N Vietnam, Myanmar, S China)

*Tambana nekrasovi* **n. sp.** (Central China)

*Tambana bella* (Mell, 1935) (NE Myanmar, SE China, N Vietnam)

*chekiana* (Draudt, 1937)

*quadrata* (Berio, 1973)

*Tambana behouneki* Speidel & Kononenko, 1998 (N Vietnam, N Thailand)

*Tambana entoxantha* (Hampson, 1894) (N India, Sikkim, Assam, Nepal, Laos, Thailand, China, Indonesia: Java, Sumatra)

*Tambana klapperichii* (Mell, 1958) (SE China)

*Tambana glauca* (Hampson, 1898) (India, Meghalaya)

*Tambana ronnyi* Thony, 1996 (N Vietnam)

*Tambana naumanni* Speidel & Kononenko, 1998 (C and E China, N Vietnam)

*Tambana burmana* (Berio, 1973) (NE. Myanmar)

*Tambana plumbea* (Butler, 1881) (Japan, South Kuriles, South Sakhalin)

***Tambana similina* **n. sp.****

(Plate II, Figs 1, 5)

Holotype: Male, China, North Yunnan, Road Lijiang-Zhongdian, Hu Thao Xia vic. 2300 m, 27°18.75'N – 99°59.27'E. 19.VI.1998, leg. DELLA

BRUNA. The holotype and paratype are deposited in the Museum Alexander Koenig, ZFMK, Bonn.

Paratype: Male, China, North Yunnan, Zhongdiang vic., 27°45.97' N – 99°39.48'E. 3.VI.1998, 3330 m, leg. DELLA BRUNA. Genitalia prep. ZFMK2018.

Derivatio nominis: The specific name is given by the external similarity of the species to *Tambana c-album*.

Description: Adult (Fig. 1). Wingspan of male 54–56 mm. Antennae of male filiform. Head, thorax and abdomen dark brownish gray, tegula patagias paler, dark olive-gray, bordered with black. Abdomen with crests on segments IV to VII formed by four patch of dark brownish gray erected hair-scales. Ground colour of forewing dark, brownish gray with black elements of wing pattern. Main elements of wing pattern black, some diffused. Basal line as thin diffused black mark surrounded with brown on costal field. Subbasal line expressed as twin black line, stronger in costal field, filled with dark brown inside. Medial field brownish gray, with some paler brown smutch in central part. Orbicular relatively small, outlined by black line, filled with dark brown. Medial shade as dark waved, slightly diffused line, more intensive in costal field. Reniform dark brown inside, bordered with black outward and with two whitish marks in basal and apical part, the apical mark small, indistinct. Outer line twin, dark, more or less W-like curved, filled inside with dark brown. The area between outer margin of orbicular and outer line with prominent some diffused whitish or brownish white smutch and small one following to costal margin. Subterminal line dark, dentate, some diffused inward. Subterminal and terminal fields dark brown, lighter and more brownish than medial part of wing. Veins in medial and subterminal fields some darker than ground color. Terminal line as row of dark diffused spots. Cilia brown. Hindwing orange yellow, contrasting with forewing, with black suffusion at inner part from base to anal angle. Terminal line wide, black. Cilia dark brown, white or whitish in front of veins, with thin white border near anal angle. Forewing yellow on underside, with brownish suffusion in costal area, large black around reniform, black outer line and brownish gray subterminal and terminal fields and with pale yellowish gray spot in anal angle. Hindwing yellow, with prominent wide black band in central part, black wide terminal band and yellowish-gray suffusion in terminal part of wing.

Male genitalia: (Fig. 5). Uncus moderately massive, somewhat spatulate. Tegumen without extensions (peniculi) in central part as in *T. c-*

*album*. Vinculum narrow. Juxta plate-like, with cut from upper side, extended vertically. Valva massive, moderate in length, with almost parallel costal and ventral margins, quadrangular shape in apex. Saccus massive. Harpe large, extended length of valva in ventral side, moderate, almost strait, slightly curved, pointed. Apex of valva with patch of setae. Aedeagus large, moderate with strong sclerotized apical part and sclerotized triangular comb on apex. Carina hard, scobinated. Vesica everted ventrally, almost equal to aedeagus in length. It is narrow in beginning, became wide apically, with moderate apical diverticulum and patch of small cornuti.

Female unknown.

Differential diagnosis: The new species is most similar to *T. c-album* (fig. 3), (figured by HAMPSON 1913), but differs by larger size (*T. similina* **n. sp.** 55–56 mm, *T. c-album* 48–50 mm), darker forewings coloration, absence of whitish suffusion in submedial and medial fields and smaller, less intensive and less diffused whitish area between reniform and outer line. The male genitalia of the new species differs from *T. c-album* (Fig. 7) in the configuration of the genitalic armature: by shape of valva, which is somewhat extended apically and almost rectangular on apex in *T. similina* **n. sp.**, almost strait harpe (curved in *T. c-album*), shape of juxta (vertically extended plate in *T. similina* **n. sp.** and wide, horizontally extended plate in *T. c-album*). The structure of the vesica is also different, since it is more narrow in *T. similina* **n. sp.** with moderate apical diverticulum and apical patch of small cornuti and large one, with wide apical diverticulum and two patches of moderate and small cornuti in *T. c-album*.

Distribution: The species is known only from the type locality in China, North Yunnan.

Biology: The species inhabits upper forest zone at an elevation 2300–3300m. Flight period is from beginning to the second decade of June. Supposedly it is univoltine, as other species of the genus.

***Tambana nekrasovi* n. sp.**

(Plate II, Figs 2, 6)

Holotype: Male, China, Shaanxi Prov. Taibashan Range, 1900 m, Houzhenzi vil. 33°53'N 107°49'E, 15. VIII–15. X 1999, local collector. Ex

coll. Viktor SINJAEV. The holotype is preserved in the collection of A. V. NEKRASOV (Moscow), and will be later passed to Zoological Museum of Moscow state University.

Derivation nominis: The name is dedicated to Mr. Andrei Vladimirovich NEKRASOV, famous Russian collector of Noctuidae to whom I am deeply grateful for providing me with valuable material from China and fruitful discussion.

Description: Adult (Figs 1, 2). Wingspan 45 mm. Antennae of male serrate. Head and thorax covered by dark gray and whitish hair-like scales, abdomen dark brown gray, with crests on segments IV to VII formed by erected brown hair-scales bordered with white hairs. Ground colour of forewing dark brown with some shining. Veins blackish, disseminated with white scales. Main elements of wing pattern dark brown or black, not contrasting, suffused with whitish scales. Costal area with stronger whitish suffusion. Basal line marked black on costal field. Subbasal band twin, with wide, diffused inner line and more clear outer line and brown inside. Orbicular small, rounded, brown. Reniform typical shape, brown, surrounded with black. Cell between orbicular and reniform black. Medial shade as twin dark dentate diffused line. Outer line twin in upper half of wing, dark, dentate, marked by a black mark in costal area. Subterminal line dark, dentate, diffused, wide in upper part of the wing. Subterminal and terminal fields slightly darker and more brownish than medial wing parts, whitish suffusion on wings in subterminal field more expressed. Terminal line as row of black semilunar spots, bordered inward with thin, whitish line. Cilia brown. Hindwing deep orange yellow, contrasting with forewing, with black and brownish suffusion at inner part from base to anal angle. Discal spot black, large, diffused. Terminal band wide, cilia black, with whitish yellow small spots in front of veins.

Forewing yellow on underside, with brownish suffusion in the costal area, large black diffused area around reniform, black outer line and black wide, diffused terminal line. Hindwing yellow, with prominent wide black band in central part, black wide terminal band and yellowish-grey suffusion in terminal part of wing.

Male genitalia: The genitalia of the new species is most similar to *T. arctoides*. Uncus relatively massive, spatulate. Tegumen with moderate extensions (peniculi) in central part. Juxta plate-like, Valva massive, relatively short. Harpe large, about half the length of valva, massive, strongly sedge-like curved, pointed. Costal margin of valva and apex of valva with

hard setae. Aedeagus moderate, relatively long. Carina slightly scobinated. Vesica everted ventrally, moderate in length, almost equal to aedeagus, with short wide and long narrow basal diverticula and two patches of numerous relatively large and medium-sized spine-like cornuti on dorsal and ventral sides.

Female unknown.

Differential diagnosis: The new species is externally quite dissimilar to *T. arctoides* (Fig. 4) by size, habitus and wing pattern, but by genitalia characters it shows the relation to the same group. The male genitalia differ from those of *T. arctoides* (Fig. 8) by a shorter and more massive valva, which is expanded apically, some more massive and more curved harpe, by the structure of juxta and by structure of aedeagus and vesica. The aedeagus is less massive than in *T. arctoides*, the vesica is narrower, with two basal diverticulum.

Distribution: The species is only known from the type locality China, Shaanxi Prov., Taibashan Range.

Biology: The new species inhabits mountain forest at elevation about 2000 m. Flight period is August.

### ***Tambana arctoides* Speidel & Kononenko, 1998**

(Plate II, Fig. 4)

The species has been described from North Vietnam (SPEIDEL & KONONENKO 1998), the female has been found among materials described by BERIO (1973) from Myanmar, indicated as "allotype" of *Tambana succincta* Berio, 1973. The documented record of the species from SE China is presented below.

Material examined: 1 female, China, Sichuan Gongga Shan, 2300 m, 25.V.–8.VI.2001 29°41'N 101°58'E, leg. V. SINJAEV, coll. A. V. NEKRASOV.

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