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A new species of *Crambus* Fabricius, 1798 from China (Lepidoptera: Crambidae)

W. C. Li

Abstract

Crambus duospineus Li, sp. n. is described from Jiangxi Province, China. The new species can be diagnosed by the sacculus of male genitalia with a strongly sclerotized apex, ending with two spine-like projections, and the well-developed apical spine of the phallus is approximate half as long as the phallus. Images of the head, habitus, and male genitalia of *Crambus bipartellus* South, 1901 are provided for comparison.

KEY WORDS: Lepidoptera, Crambinae, *Crambus*, new species, China.

Una nueva especie de *Crambus* Fabricius, 1798 de China (Lepidoptera: Crambidae)

Resumen

Se describe de la provincia de Jiangxi, China, *Crambus duospineus* Li, sp. n. La nueva especie puede ser diagnosticada por el sacculus de la genitalia del macho con una fuerte esclerotización en el apex, terminando con dos espinas en su parte final y la espina apical del phallus es, aproximadamente, la mitad de la longitud del phallus. Se proporcionan imágenes de la cabeza, habitus y de la genitalia del macho de *Crambus bipartellus* South, 1901 para comparación.

PALABRAS CLAVE: Lepidoptera, Crambinae, *Crambus*, nueva especie, China.

Introduction

The genus *Crambus* was erected by Fabricius in 1798 (FABRICIUS, 1798), and its type species *Phalaena pascuella* Linnaeus, 1758 was subsequently designated by CURTIS (1826). Most members of the genus have a white longitudinal stripe on the forewing that extends from the base to the apex of the discal cell or to the termen. In species delimitation, the male genitalia provide significant characters, especially the structures of the valva (costa, sacculus) and cornuti in the phallus. To date, the genus has 167 species worldwide and occurs in each biogeographical region (NUSS *et al.*, 2020). Before this study, twenty-one species has been recorded in China (BŁESZYŃSKI & COLLINS, 1962; BŁESZYŃSKI, 1965; CHEN *et al.*, 2005). In the present paper, a new species of the genus is added from China. All the specimens studied are deposited in the Insect Museum, Jiangxi Agricultural University, Nanchang, China (JXAUM).

Crambus duospineus Li, sp. n. (Figs 1-4)

Material examined: Holotype (&&), CHINA, Jiangxi Province: Wugong Mountain [27°27'N,

114°11'E], 1800 m, 13-IX-2014, Weichun Li, genitalia slide no. WD16076. Paratype, 1 (&&), same data as holotype.

Description Adult (Figs 1-2): Forewing length 10.5-11.0 mm. Frons and vertex ochre yellow. Labial palpus twice as long as diameter of compound eye, ochreous mixed with pale brown except basally white; first and second segments porrect, third segment slightly downward. Maxillary palpus slightly upright, basal white, ventrally ochre yellow mixed with pale yellow. Antenna scape dorsally white; flagellomere dorsally white, ventrally ochre yellow. Thorax blackish brown. Forewing scattered with pale brown and ochre yellow scales; longitudinal stripe white and lined with brown, extending from base to apical part of distal cell, its basal two-thirds gradually broadened and distal third narrowing to triangular apex; cilia pale brown. Hindwing greyish brown; cilia white. Abdomen pale brown.

Male genitalia (Figs 3-4): Uncus thin and long, tapering to point apex. Gnathos slightly longer than uncus, curved downward near apex, distally blunt. Tegumen as long as gnathos, with broad dorsal bridge. Valva gently broadened towards rounded apex. Sacculus well-developed, concave near middle, with distal one fourth gently broadened; apex strongly sclerotized, adorned with a spine-like projection on dorsal and ventral margin. Saccus broad, with concave distal margin medially. Phallus slightly shorter than valva, ventral wall with thickly sclerotized, slightly curved thin rod in apical half.

Female: Unknown.

Distribution: China (Jiangxi).

Diagnosis: The new species (Fig. 1) is similar in forewing pattern to *Crambus bipartellus* South, 1901 (Fig. 5), but it can be distinguished from the latter by the two spine-like projections at the apex of sacculus (Fig. 3b) and the phallus with the wall forming a thickly sclerotized thin rod in its apical half (Fig. 4b). In *C. bipartellus*, the sacculus has a single apical projection (Fig. 6) and the phallus is without apical spine but has two spine-like cornuti (Fig. 7).

Natural history: Unknown except that the moths fly near middle of September. The habitat in which this species has been collected is located at an altitude of 1800 m, on the south slop of Mount Wugong; and the vegetation at the collecting locality consists of *Miscanthus* sp. (Poaceae).

Etymology: The specific name is derived from the Latin prefix *duo-* = double and the Latin *spineus* = spinous, in reference to the sacculus ending with two apical spines in male genitalia.

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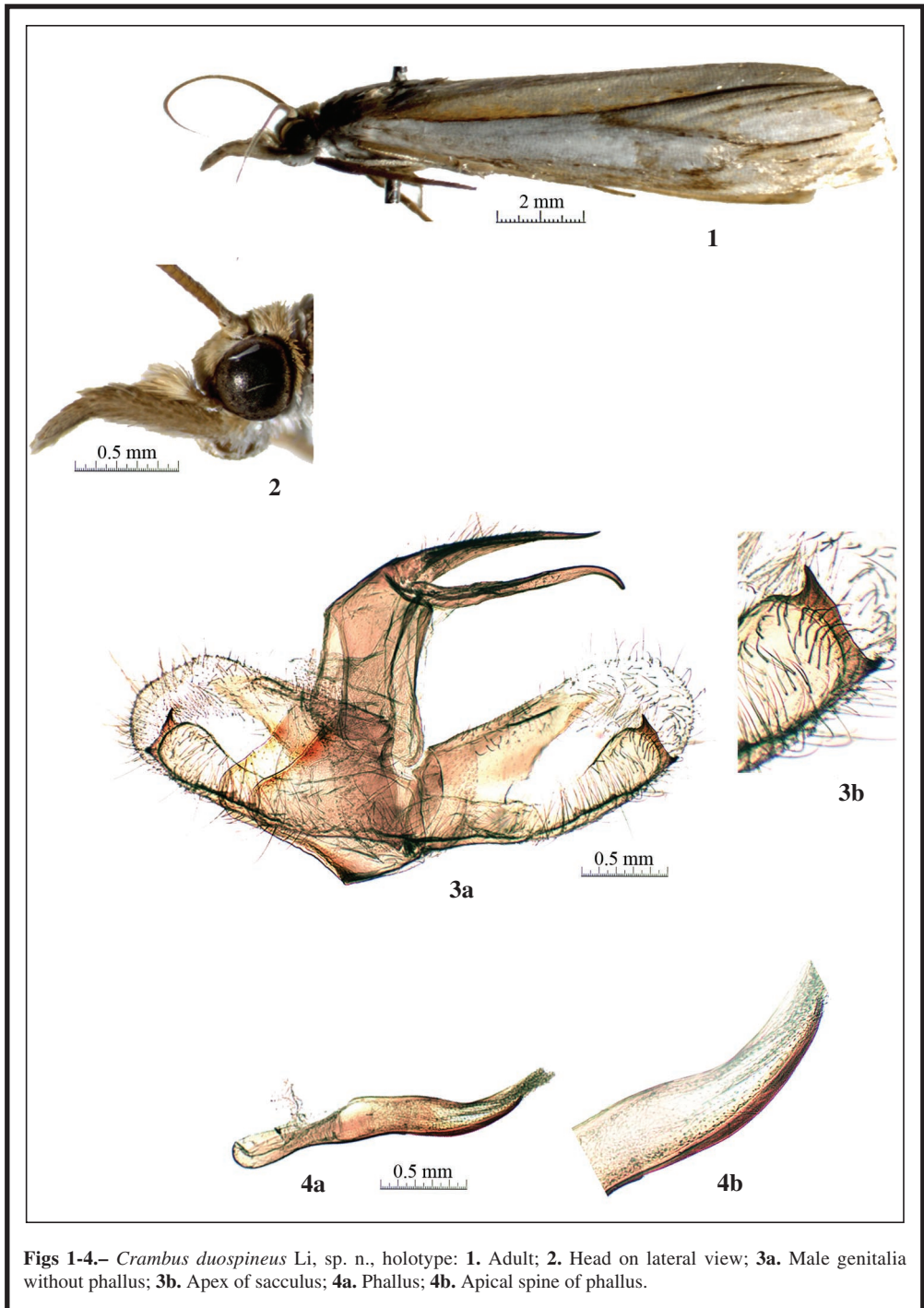
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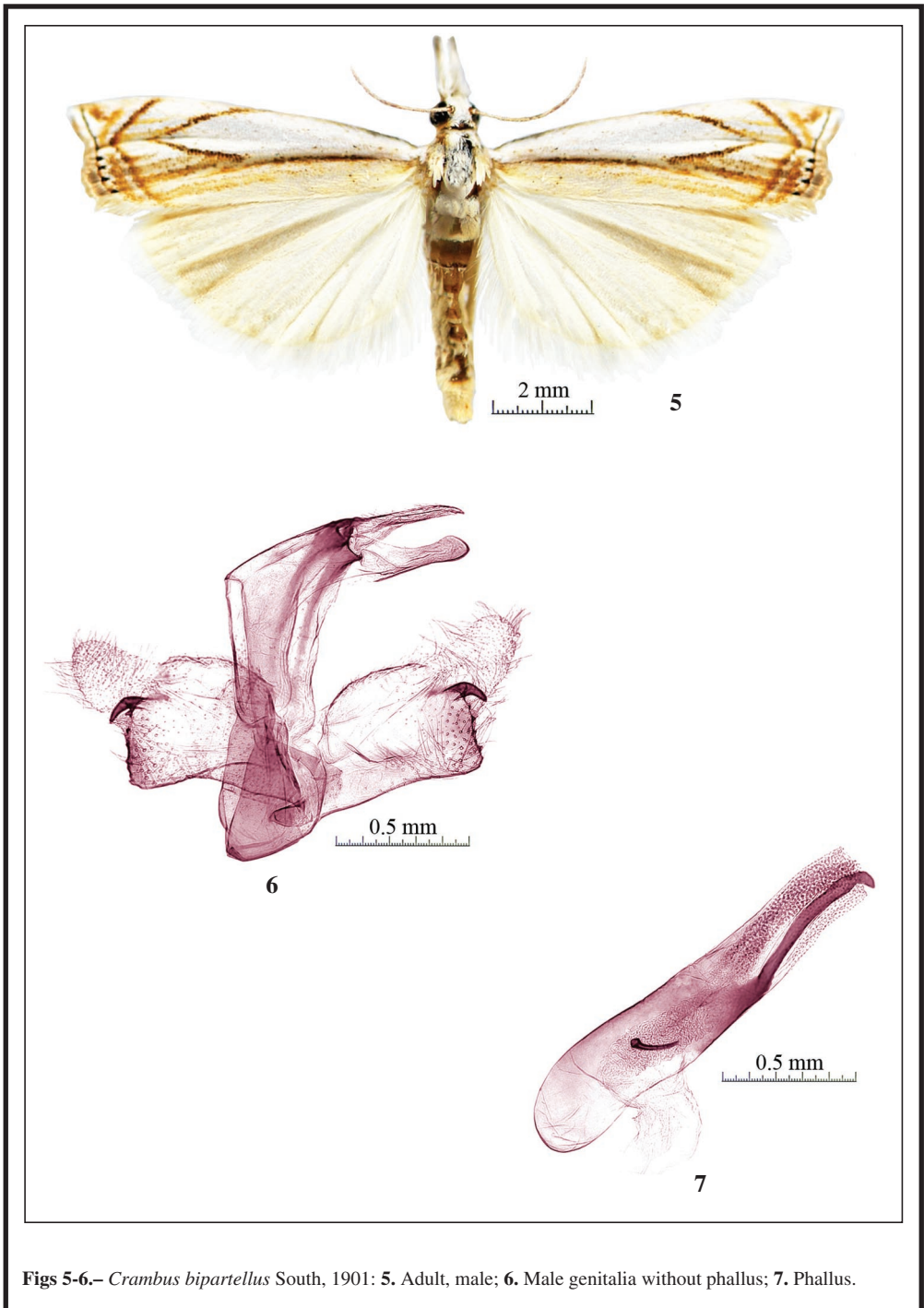
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Figs 1-4.– *Crambus duospineus* Li, sp. n., holotype: **1.** Adult; **2.** Head on lateral view; **3a.** Male genitalia without phallus; **3b.** Apex of saccus; **4a.** Phallus; **4b.** Apical spine of phallus.



Figs 5-6.— *Crambus bipartellus* South, 1901: **5.** Adult, male; **6.** Male genitalia without phallus; **7.** Phallus.