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avives@eresmas.net

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Li, W.C.

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One new species of the genus *Scoparia* Haworth, 1811 from China (Lepidoptera: Crambidae, Scopariinae)

W. C. Li

Abstract

Scoparia cordata Li, sp. n. is described from Jiangxi Province, China. Image of the adult is provided and the tympanal organ and genitalia are illustrated.

KEY WORDS: Lepidoptera, Crambidae, Scopariinae, *Scoparia*, new species, China.

Una nueva especie del género *Scoparia* Haworth, 1811 de China (Lepidoptera: Crambidae, Scopariinae)

Resumen

Se describe de la Provincia de Jiangxi, China *Scoparia cordata* Li, sp. n. Se proporcionan imágenes de adulto y se ilustra el órgano timpánico y genitalia.

PALABRAS CLAVE: Lepidoptera, Crambidae, Scopariinae, *Scoparia*, nueva especie, China.

Introduction

Scoparia was established by Haworth in 1811 with *Tinea pyralella* Denis & Schiffermüller, 1775 as the type species. This genus can be recognized by the male genitalia with a long and thin gnathos, the well-developed sacculus with a free distal process and the presence of cornuti in the phallus.

The genus is represented on all continents except Antarctica and many oceanic islands but do not occur in tropical lowland forests (NUSS, 1998; LI *et al.*, 2010). To date, it comprises 231 described species (NUSS *et al.*, 2003-2011). Prior to this study, 26 species were recorded in China (LI *et al.*, 2010). The aim of the present paper is to add one new species to the genus. Terminology for morphological structures follows NUSS (2005). Genitalia were prepared and mounted according to the methods introduced by LI (2002). All the studied specimens are deposited in the Insect Museum, Jiangxi Agricultural University, Nanchang, China (JXAUM).

Scoparia cordata Li, sp. n. (Figs. 1-3)

Material examined: Holotype ♂, CHINA, Jiangxi Province: Tonggu, Xian'gutan [28° 32' N, 114° 22' E], 800 m, 16-IX-2011, leg. Weichun Li, genitalia slide no. LW11024. Paratype, 1 ♂, same data as holotype.

Description: Adult (Fig. 1): Forewing length 5.5-6.5 mm. Frons and vertex blackish brown. Labial palpus blackish brown, first segment white ventrally at base. Maxillary palpus blackish brown, mixed with white on inner surface. Antenna blackish brown and white alternately on dorsal surface, pale

brown on ventral surface. Patagium blackish brown. Thorax grayish white mixed with pale brown. Tegula blackish brown mixed with white. Forewing sparsely suffused with blackish brown scales; antemedian line white, straight; antemedian stigmata blackish brown, ovate; distal discoidal stigma 8-shaped, blackish brown, filled with ochre, connected with blackish brown spot at costa; postmedian line white, meeting costa and dorsum perpendicularly, bent towards distal discoidal stigma, concave near dorsum; subterminal line white, concave medially and connected with postmedian line; termen white, with a row of pale brown dots; fringe white, pale brown near base. Hindwing grayish white, sparsely suffused with pale brown scales along veins; fringe concolorous with forewing. Legs white, tibiae covered with sparse blackish brown scales on outer side; tarsi chequered white and blackish brown on outer side.

Tympanal organ (Fig. 2): Bulla tympani bean-shaped, inner margin convex anteriorly and concave posteriorly. Pons tympani slender, divided into two long and thin branches at basal one third, reaching beyond posterior margin of first tergite. Fornix tympani developed, obtuse angled posteriorly. Saccus tympani convex posterolaterally and concave posteromedially, extending to posterior one fourth of second tergite. Venula secunda reduced to inconspicuous pleats, situated at outer side of saccus tympani.

Male genitalia (Fig. 3): Uncus ovate, densely covered with setae. Gnathos two thirds as long as uncus, slightly swollen distally, tip rounded. Valva narrow basally, broadened towards rounded apex. Costa arched at basal one third. Sacculus sclerotized strongly, basal half with long and thin ventral fold, concave ventrodistally; free distal process at about three fourths of valva. Juxta characteristically heart-shaped. Phallus nearly as long as valva, straight, distal tip sclerotized, bearing many different-sized of tiny granules and spines; cornuti consisting of one large and elongate spine and a cluster of different-sized tiny spines, tiny cornuti situated on base of large cornutus.

Female: Unknown.

Distribution: China (Jiangxi).

Diagnosis: This species is similar to *S. spinosa* Li, Li & Nuss, 2010. It can be distinguished from the latter by the ovate antemedian stigmata and the thin subterminal line in the forewing, and the distally rounded gnathos, the heart-shaped juxta and the large cornutus in the male genitalia. In *S. spinosa*, the antemedian stigmata are elongate, the subterminal line is broad, the tip of gnathos is pointed, the juxta is V-shaped and the phallus contains a group of more than twenty medium-sized cornuti.

Etymology: The specific name is derived from the Latin *cordatus* = heart-shaped, in reference to the male genitalia with a heart-shaped juxta.

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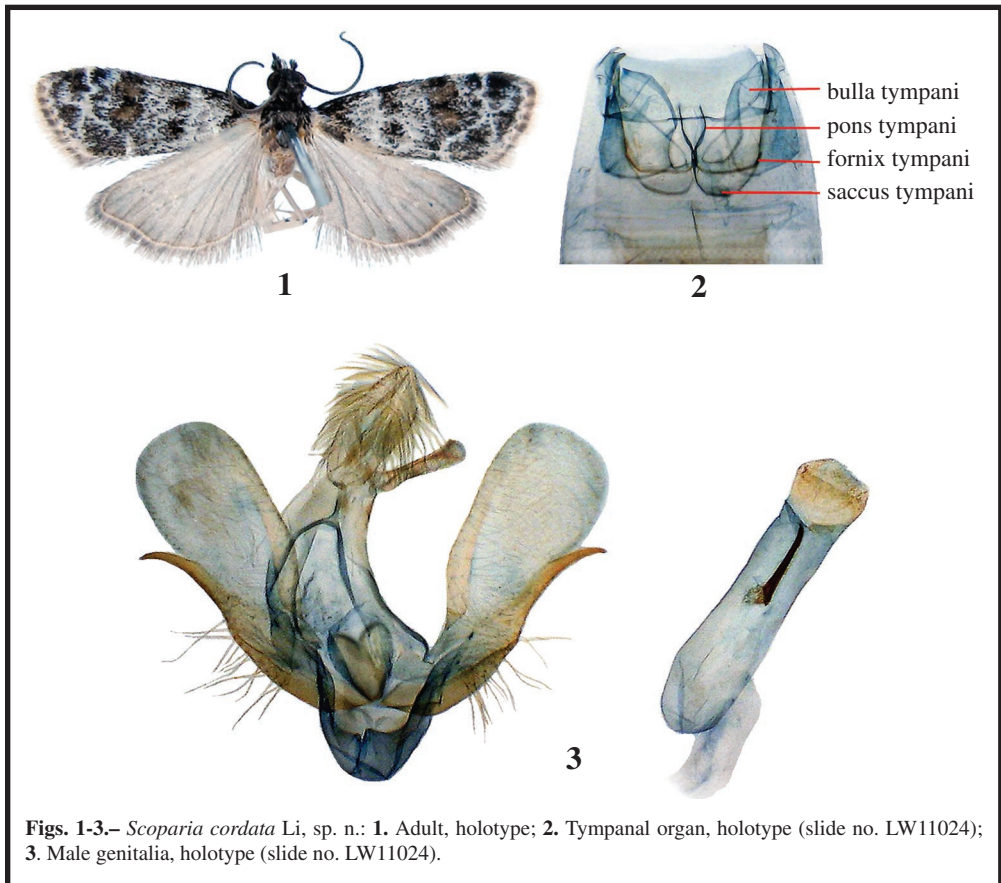
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W. C. L.
College of Agronomy
Jiangxi Agricultural University
Nanchang 330045
R. P. CHINA / P. R. CHINA
E-mail: weichunlee@126.com

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Figs. 1-3.– *Scoparia cordata* Li, sp. n.: **1.** Adult, holotype; **2.** Tympanal organ, holotype (slide no. LW11024); **3.** Male genitalia, holotype (slide no. LW11024).