

Erpis Walker, 1863 a new record to the fauna of China (Lepidoptera: Crambidae)

W. C. Li

Abstract

The genus *Erpis* Walker, 1863 known originally from Sarawak of Malaysia is recorded from China for the first time. This genus contains a single species *Erpis macularis* Walker, 1863. It is redescribed in detail herein based on the specimen collected from Yunnan, southwestern China. The adult, tympanal organ and male genitalia are illustrated.

KEY WORDS: Lepidoptera, Crambidae, *Erpis macularis*, new record, redescription, China.

Erpis Walker, 1863 un nuevo registro para la fauna de China (Lepidoptera: Crambidae)

Resumen

Se registra por primera vez para China el género *Erpis* Walker, 1863 conocido originalmente de Sarawak en Malaysia. Este género contiene una sola especie *Erpis macularis* Walker, 1863. Se redescrive en detalle basándose sobre el espécimen colectado en Yunnan, sudoeste de China. Se ilustran el adulto, órgano timpánico y genitalia del macho.

PALABRAS CLAVE: Lepidoptera, Crambidae, *Erpis macularis*, nuevo registro, redescipción, China.

Introduction

The *Erpis*, a genus of the subfamily Cybalomiinae Marion, 1955 (NUSS *et al.*, 2018), was established with *Erpis macularis* Walker, 1863 as the type (WALKER, 1863). At present, the genus only contains the single species, which has compact labial palpi and is often mistaken for a member of the Arctiidae (Lithosiinae), and the thick wing scaling enhances this impression (ROBINSON *et al.*, 1994). However, it is can be confirmed definitely as a Crambidae member, by using the morphological characters of tympanal organ and male genitalia.

In the present work, the genus *Erpis* is recorded from China for the first time. The redescription in detail of *E. macularis* Walker is given. The adult, tympanal organ and male genitalia are illustrated. The studied specimen is deposited in the Insect Museum, Jiangxi Agricultural University, Nanchang, China (JXAUM).

Erpis Walker, 1863

Erpis Walker, 1863: 133. Type species: *Erpis macularis* Walker, 1863, by monotypy.

Erpis macularis Walker, 1863 (Figs. 1-4)

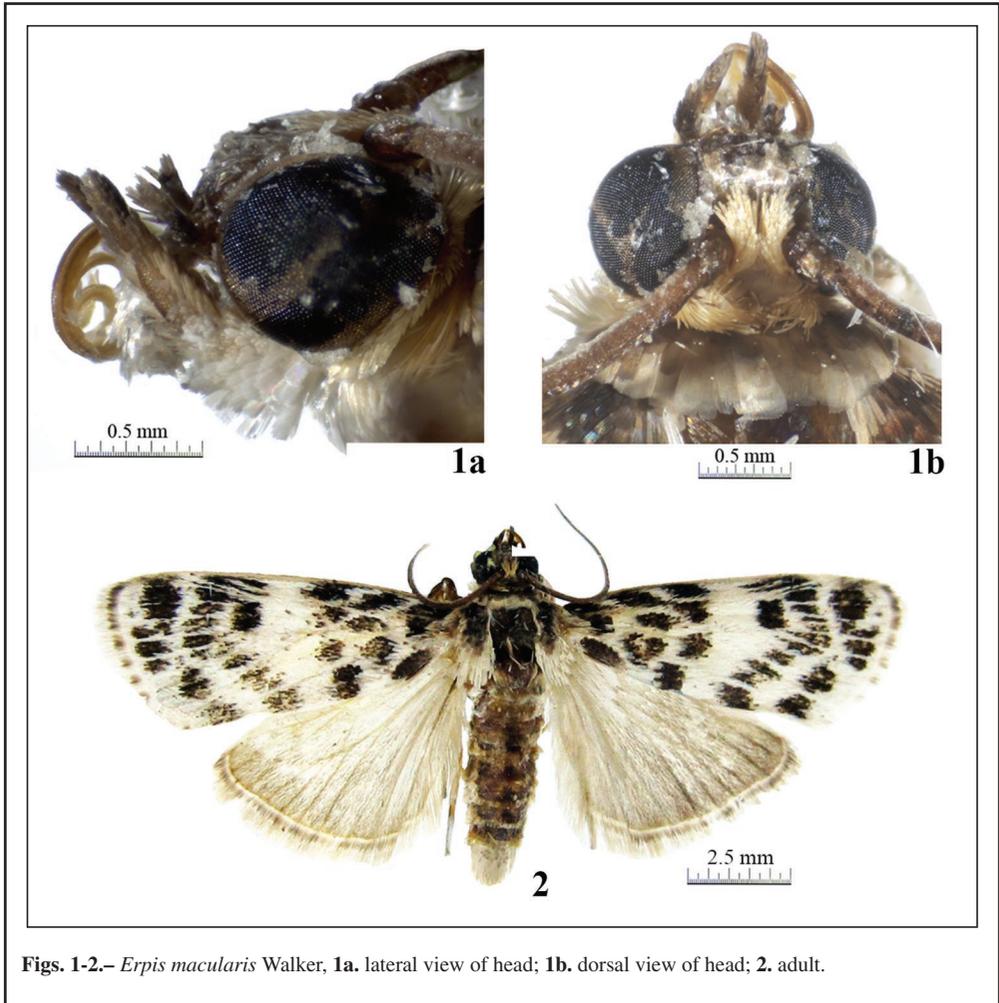
Erpis macularis Walker, 1863. *List spec. Lepidop. insects coll. Brit. Mus.*, 27: 133; Robinson *et al.*, 1994: 171, plate 29, fig. 1.

Type locality: Malaysia, Sarawak.

Type deposition: Natural History Museum, London.

Material examined: 1 ♂, CHINA, Yunan Province: Xishuangbanna, Mengla, Bubang [101° 34'E, 21° 36'N], ca. 700 m, 20-VIII-2014, leg. Weichun Li, prep. gen. LW17011.

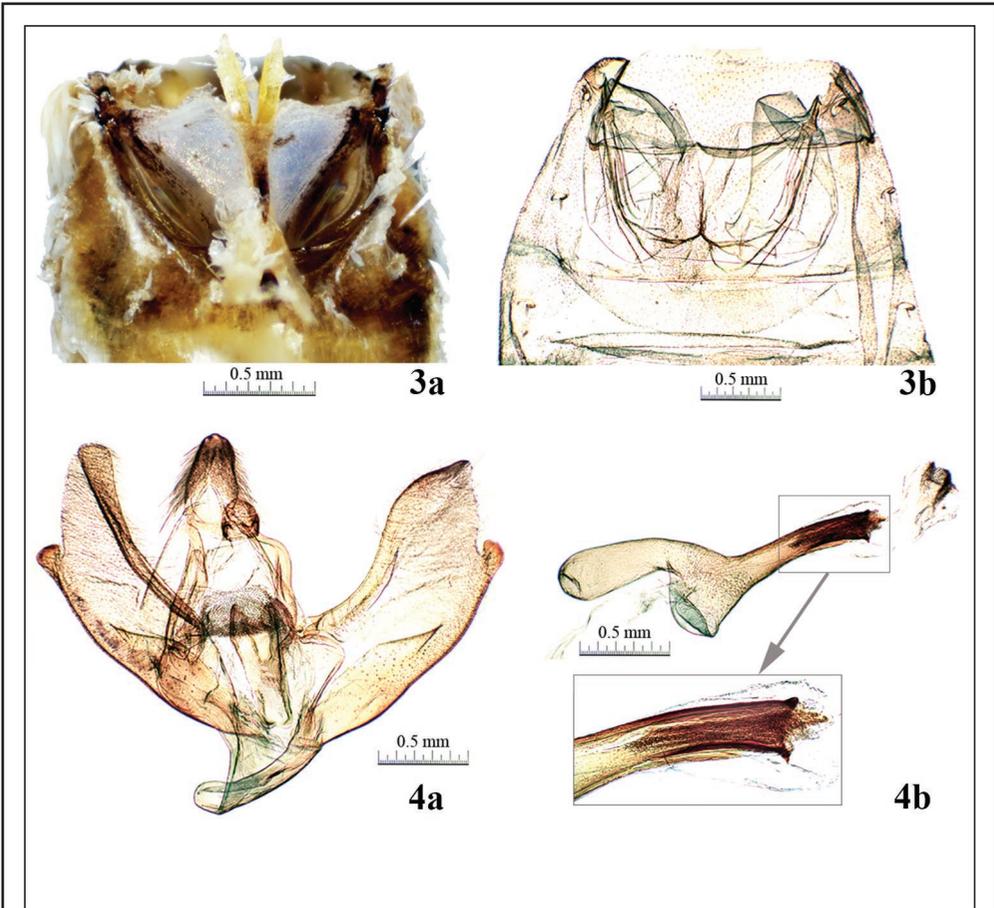
Redescription Adult (Figs. 1-2): Forewing length 8.5 mm. Frons and vertex pale brown mixed with white; two clusters of pale yellow scales between antennae. Labial and maxillary palpi upright, reaching beyond vertex, pale brown; basally ventral side of labial palpi densely covered with white scales. Antenna brown. Forewing ground colour white, decorated with black stigmata; base with two stigmata, costal one crescent-shaped, dorsal ovate; two lines of ovate stigmata between base and middle area, inner line consisted with three stigmata, and outer one having four stigmata; distal discoidal stigma nearly rectangular; postmedian and subterminal lines composed of stripe-like stigmata, and outcurve at about costal two fifths; fringe white mixed with pale brown. Hindwing greyish white, sparsely with pale brown scales; fringe concolourous with forewing. Abdomen brown mixed with black, distally white.



Figs. 1-2.— *Erpis macularis* Walker, **1a**. lateral view of head; **1b**. dorsal view of head; **2**. adult.

Tympanal organ (Fig. 3): Bulla tympani slightly concave on inner margin. Pons tympani divided into two branches at base. Saccus tympani extending to posterior slide of second tergite. Venula secunda reduced.

Male genitalia (Fig. 4): Uncus basal broad, distal half gently narrowed towards rounded apical tip. Gnathos ovate. Tegumen broad, about twice length of uncus. Valva with equal width at basal two thirds, distal part narrowed towards blunted rounded apex. Costa strongly sclerotized, reaching end of valva, concave near middle. Sacculus well-sclerotized, bearing triangular protuberance near middle, ending with ovate projection, reaching about distal one-third of valva. Juxta Y-shaped, distal half incised in V-shape. Saccus well-developed, basally broad and gradually becoming narrowed towards blunted rounded tip. Phallus nearly as long as valva, medial part curved and having sac-shaped protuberance, distal part densely covered with tiny spines, apical tip armed with two small spine-like projections; ductus ejaculatorius arising from base of sac-shaped protuberance.



Figs. 3-4.— *Erpis macularis* Walker, **3a**, tympanal organ before preparation; **3b**, tympanal organ after preparation; **4a**, ventral view of male genitalia and phallus removed; **4b**, phallus.

Female: Unavailable.

Biology: Only known the adults have been collected at light.

Distribution: China (Yunnan); Brunei, Indonesia, Malaysia.
Remarks: This species is recorded from China for the first time.

Acknowledgments

I am deeply grateful to Dr Jurate De Prins for her kind support during my study in the insect collection of Natural History Museum, London. Special thanks are given to the anonymous reviewers for their insightful suggestions on the manuscript. This work was supported by the National Natural Science Foundation of China (Grant No. 31601885).

BIBLIOGRAPHY

- NUSS, M., LANDRY, B., MALLY, R., VEGLIANTE F., TRANKNER A., BAUER F., HAYDEN J., SEGERER A., SCHOUTEN R., LI H., TROFIMOVA T., SOLIS M. A., DE PRINS J. & SPEIDEL W., 2003-2018.– *Global Information System on Pyraloidea*. Available from <http://www.pyraloidea.org/> (accessed on 5 January 2018).
ROBINSON, G. S., TUCK, K. R. & SHAFFER, M., 1994.– *A field guide to the smaller moths of South-East Asia*: 309 pp. Malaysian Nature Society, Kuala Lumpur.
WALKER, F., 1863.– Crambites & Tortricites.– *List of the Specimens of Lepidopterous Insects in the Collection of the British Museum*, **27**: 1-286.

W. C. L.
College of Agronomy
Jiangxi Agricultural University
Nanchang 330045
R. P. CHINA / P. R. CHINA
E-mail: weichunlee@126.com
<https://orcid.org/0000-0003-1411-6533>

(Recibido para publicación / *Received for publication* 28-IV-2018)
(Revisado y aceptado / *Revised and accepted* 30-V-2018)
(Publicado / *Published* 30-XII-2018)