



Five new East-Asian species of the genus *Ypsolopha* Latreille (Lepidoptera: Ypsolophidae)

MARGARITA G. PONOMARENKO^{1,3,5}, JAE-CHEON SOHN²,
YULIYA N. ZINCHENKO³ & CHUN-SHENG WU⁴

¹Institute of Biology and Soil Science, Far Eastern Branch of Russian Academy of Science, pr. 100-letiya, 159, Vladivostok 690022, Russia

²Department of Entomology, University of Maryland, 4112 Plant Sciences Building, College Park, MD 20742, USA

³Far Eastern State University, Oktyabrskaya str., 27, Vladivostok, 690091, Russia

⁴Institute of Zoology, Chinese Academy of Science, Beijing 100101, China

⁵Corresponding author. E-mail: margp@ibss.dvo.ru

Abstract

Five new species of the genus *Ypsolopha* Latreille are described from East Asia: *Y. atrobrunnella* Ponomarenko et Sohn, **sp. nov.** from Russia and China; *Y. acerella* Ponomarenko, Sohn et Zinchenko, **sp. nov.** from Russia and Korea; *Y. yangi* Ponomarenko et Sohn **sp. nov.** from Russia and China; *Y. tesselatidorsata* Ponomarenko et Zinchenko **sp. nov.** from Russia; *Y. lutisplendida* Sohn et Wu, **sp. nov.** from China. The host plants are indicated for *Y. atrobrunnella* (*Crataegus maximowiczii* Schneid., *Pyrus* sp.), *Y. acerella* (*Acer ginnala* Maxim.) and *Y. lutisplendida* (*Pinus tabulaeformis* Carr.).

Key words: Lepidoptera, Ypsolophidae, *Ypsolopha*, new species, East Asia, Russia, Korea, China

Introduction

The predominantly Holarctic genus *Ypsolopha* Latreille, 1796 includes more than 120 species, which represent over 90% of the species diversity of the family Ypsolophidae (Dugdale *et al.* 1998; Pogue 2009). More than half of the *Ypsolopha* species have been described from the Palearctic Region. In second half of last century, a few local faunistic works that reviewed all known information on this group in the region were published, some of which played a seminal role for subsequent research (*e.g.* Moriuti 1977; Zagulyaev 1981; Gershenson 1997). Several papers published during the last decade indicate increasing interest in this group, especially in the East Asian fauna, which remains poorly known (Byun & Park 2001; Oku 2003; Ijima & Kawahara 2005; Sinev & Dubatolov 2007; Zinchenko & Ponomarenko 2008). Recently, on the basis of specimens collected in the Russian Far East, Korea and China, three new species were described and distributional ranges for some species were significantly extended (Sohn *et al.* 2010). An additional five new species of *Ypsolopha* are described in the present paper.

Material and methods

Our study is based on material from the following institutions: Institute of Biology and Soil Sciences (IBSS), Far Eastern Branch of Russian Academy of Sciences, Vladivostok, Russia; Zoological Institute (ZIN), Russian Academy of Sciences, St. Petersburg, Russia; Institute of Zoology of Chinese Academy of Sciences (IZCAS), Beijing, China; Natural History Museum (BMNH), London, Great Britain; and Chungbuk National University (CBNU), Cheongju, South Korea. The depositories of types are indicated in the list of specimens examined. Examination of specimens was carried out according to the traditional lepidopterological methods, specifically the skeleton-muscular apparatus of genitalia were macerated in 10% KOH, and the genitalia were dissected and examined in glycerol