



Nepticulidae (Lepidoptera) of East Asia (2). Study of a collection sample deposited at the Russian Academy of Sciences, with descriptions of new species and a checklist

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Abstract

Over the few couple of decades, the Nepticulidae of East Asia have been the subject of continuing investigation. Male genitalia of the nepticulid species described from Primorskiy Kray (the Russian Far East) were re-examined in the preceding paper in this journal. The present paper continues our study on the diversity and systematics of the Nepticulidae of East Asia based on a sample of specimens collected in 1974–1990 at various sites of the southern part of Primorskiy Kray and treats 35 species: two new taxa (*Ectoedemia ortiva* **sp. nov.** and *E. species 219*) and 33 other species. Seventeen of them are briefly discussed and illustrated with photographs of male genitalia. Two new synonyms are proposed, and three new distribution records are provided. We also provide an updated checklist of the Nepticulidae of East Asia, which comprises 105 species; 67 species occur in the Russian Far East and 53 in Japan (20 of which occur both in Japan and Russia). Species with Euro-East Asiatic distribution currently comprise 11% of the Japanese fauna and 16% of the continental fauna of the Russian Far East, Primorskiy Kray.

Key words: checklist, East Asia, Nepticulidae, new species, taxonomy

Introduction

Nepticulidae are a family of monotrysian Lepidoptera with about 800 described species worldwide. Studies of the East Asiatic fauna began in the early 20th century with the description of three species (*Nepticula trifasciata*, *N. gimmonella* and *Trifurcula oishiella*) by Matsumura (1931). Much later, Nepticulidae were briefly treated in “Illustrated Flora & Fauna of Korea” (Park 1983); however, no reliable species records were provided in that work. In 1984–1987 notable efforts were taken to raise our knowledge of the East Asiatic fauna of Nepticulidae from obscurity. A considerable increase in the number of species known from the continental East Asia resulted from the work of R. Puplesis (see Navickaitė *et al.* 2011a), who described 59 new species (51 currently recognized), mostly from Primorskiy Kray (Puplesis 1984a, 1984b, 1984c, 1984d, 1985, 1987; Puplesis & Ivinskis 1985). Later these species were reviewed (Puplesis 1994), followed by an annotated list of pests of cultivated plants (Kuznetsov & Puplesis 1994) and a key to the Nepticulidae of the Russian Far East (Puplesis & Diškus 1997). Most recently, Puplesis & Diškus (2003) provided a review and world catalogue of the Nepticuloidea and Tischerioidea, and (Sinev 2008) compiled a catalogue of the Lepidoptera of Russia.

The initial stimulus for studying the Japanese fauna came from Kuroko (1978, 1982, 1989, 1990), who described two new species and provided other data on leaf-mining insects of Japan. The majority of the currently known fauna (25 currently recognized species) was described in 1985 by T. C. M. Kemperman and C. Wilkinson with biological data provided by H. Kuroko and T. Kumata (Kemperman & Wilkinson 1985).

Over the following two decades, various authors continued investigations of the Nepticulidae in Japan (Kumata & Nakatani 1995; van Nieuwerkerken & Kuroko 2005; Hirano 2010; Shinozaki *et al.* 2012), also Korea (Lee & Byun 2007), China (van Nieuwerkerken & Liu 2000), and the Russian Far East (Puplesis & Diškus 2003). Male genitalia of the type material of the nepticulid species described from Primorskiy Kray (Russian Far east) were re-