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Original article

Faunistic data of micromoths (Lepidoptera) in North Korea

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ABSTRACT

In a study of material of microlepidoptera in North Korea that was collected during the zoological expeditions (1970s–1980s) conducted under a scientific agreement between Polish and North Korean academies of science, 17 species belonging to the superfamily Gelechioidea are recognized. Of the total, 11 species of Gelechiidae, two species of Oecophoridae, and two species of Coleophoridae are newly reported from North Korea. *Scrobipalpa atriplicella* (Fisher von Rölslerstamm, 1841) of Gelechiidae is reported for the first time from the Korean Peninsula. Images of adults and genitalia of all species are given.

Introduction

Microlepidoptera including Gelechiidae, Oecophoridae, and Coleophoridae in North Korea have been poorly known. Park and Razowski (1991) included 16 species of Tortricini from North Korea in a review of the Tortricini (Tortricidae) in the Korean Peninsula, based on material collected from North Korea and preserved at the Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Cracow, Poland. In the same year, Park and Byun (1991) reported 26 species of Tortricidae from North Korea, based on specimens collected from North Korea and deposited in the Hungarian Natural History Museum (HNHM), Budapest, Hungary. Sinev and Park (1994) reported *Stathmopoda stimulata* Meyrick of the family Stathmopodidae, collected from Mt. Keumkang-san, and *Batrachedra koreana* Sinev & Park of the family Batrachedridae, collected from Mt. Pektu-san, North Korea. Park et al (2001) published "Moths of North Korea," but no micromoth was included in the book.

For the North Korean fauna of Gelechiidae, only four species—*Helcystogramma triannulella* (Herrich-Schaffer), *Dichomeris heriguronis* (Matsumura), *Dichomeris oceanis* (Meyrick), and *Pectinophora gossypiella* (Saunders)—were known, until Park (1991) reported 19 species of the family including two *Autosticha* species, with descriptions of *Aroga gozmanyi* Park and *Dendrophila mediofasciana* Park, based on material deposited at the HNHM. Jaros et al (1992) reported two species of Gelechiidae, *Chinodes viduella* (Fabricius) and *Prolita sexpunctella* (Fabricius), collected from Mt. Pektu-san. Park and Ponomarenko (2007) cited 25 species of Gelechiidae from North Korea, based on previous reports and some additional specimens, in the comprehensive monograph of the family in the Korean Peninsula. Recently, Lee and Byun (2015) reported *Helcystogramma triannulella* (Herrich-Schäffer) from North Korea, but it was previously reported. As a non-gelechiid moth, *Scythropiodes issikii* (Takahashi, 1930) belonging to Oditinae, was reported by Park and Wu (1997).

In this paper, 17 species belonging to the superfamily Gelechioidea are recognized. Among them, 11 species of Gelechiidae, two species of Oecophoridae, and two species of Coleophoridae are newly reported from North Korea. *Scrobipalpa atriplicella* (Fisher von Rölslerstamm, 1841) of Gelechiidae is reported for the first time from the Korean Peninsula. Consequently, a total of 41 species of Gelechiidae, two species of Oecophoridae, two species of Coleophoridae, two species of Autostichidae, and a species of Oditinae were investigated. The subfamily Oditinae was previously placed in Lecithoceridae, but it is not associated with the family (Park, 2015).

Materials and methods

The material examined for this study was based on a small series of collections gathered from North Korea and preserved at the

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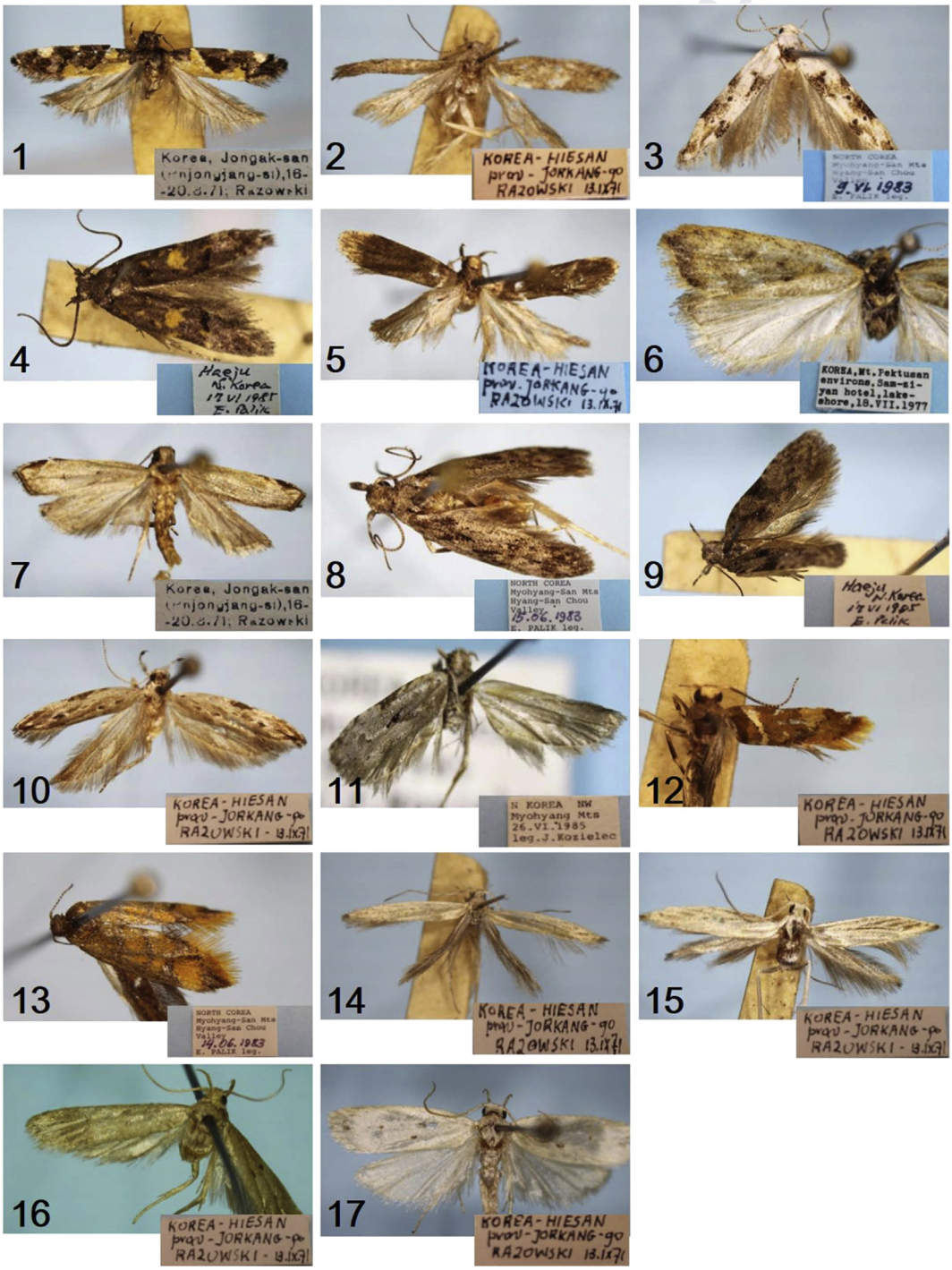
Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Cracow, Poland. The material was collected by J. Razowski, who was a well-known specialist of Tortricidae, and E. Palik, during a series of zoological expeditions in North Korea (1970s–1980s) under a scientific agreement between the science academies of both countries. For all identified species, the general specific information, including references for the original descriptions, type locality (TL), material examined, and the distributions of the species are given. Images for adults with their labels and genitalia are provided. The regional parts of South Korea are as follows—(1) Central part: Gyeonggi province, Gangwon Province, Chungbuk Province, Chungnam Province, and Gyungbuk Province; and (2) South part: Jeonnnam Province, Gyungnam Province, and Jeju Province.



Figures 1–17. Adults. 1, *Stegasta jejuensis* Park & Omelko; 2, *Scrobipalpa atriplicella* (Fisher von Rölslerstamm); 3, *Parastenolechia argobathra* (Meyrick); 4, *Carpatolechia yangyangensis* (Park); 5, *Pexicopia melitolicna* (Meyrick); 6, *Dichomeris litoxyla* Meyrick; 7, *Dichomeris rasilella* (Herrich-Shäffer); 8, *Faristenia quercivora* Ponomarenko; 9, *Farestenia ussuriella* Ponomarenko; 10, *Hypatima excellentella* Ponomarenko; 11, *Anarsia bipinnata* (Meyrick); 12, *Promalactis suzukiella* (Matsumura); 13, *Promalactis atriplagata* Park & Park; 14, *Coleophora* sp.; 15, *Coleophora versurella* Zeller; 16, *Autostich modicella* (Meyrick); 17, *Scythropiodes issikii* (Takahashi).

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