Alucitidae (Lepidoptera) of Korea: Description of a new species and records of two previously unrecorded species

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ABSTRACT

The family Alucitidae in Korea is reviewed. One species is described as new, *Pterotopteryx koreana* sp. nov., and two species are reported for the first time, *Alucita japonica* (Matsumura) and *Pterotopteryx spilodesma* (Meyrick). A key to the three species is provided, along with data on their biology and geographical distribution. External and genitalic characteristics of the species are described and illustrated.

Key words: Lepidoptera, Alucitidae, *Alucita*, *Pterotopteryx*, new species, new records, Korea

INTRODUCTION

The family Alucitidae, the many- or multi-plumed moths, includes over 180 described species worldwide (Gielis 2003), occurring primarily in temperate regions (Scoble 1992). Most members of the family are of little economical importance, but these moths often attract attention owing to their curious 'multi-plumed' wing morphology. The fore- and hindwing are each divided, usually into six feathery plumes or lobes; a few species have seven lobes in the hindwing (Holloway *et al.* 1987).

Larvae of Alucitidae tunnel in buds, seeds, leaves, shoots, and stalks of mainly herbaceous plants and shrubs, inducing a gall-like swelling. Pupation occurs in a rough silken cocoon on the ground or within the feeding site (Holloway *et al.* 1987; Munroe 1982).

The phylogenetic position of the family within Lepidoptera is still uncertain. The family was assigned to Pyraloidea by Bourgogne (1951) and to Copromorphoidea by Meyrick (1928) and (Common 1970). Minet (1983) separated the Copromorphidae and Carposinidae from Alucitoidea, assigning them to the superfamily Corpromorphoidea. Scoble (1992) stated that "they are more likely to represent the sister group of