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New Tortricidae (Lepidoptera) from East Africa with an account of the tortricid fauna of acacia in the Kenyan Rift Valley

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Abstract

Species of Tortricidae whose larvae feed on acacia are listed, including five new species: *Hystrichophora bussei* Agassiz, *Endotera cyaneana* Agassiz, *Paraeccopsis variegana* Agassiz & Aarvik, *Coniostola flavitinctana* Agassiz & Aarvik, and *C. rufitinctana* Agassiz & Aarvik. Six additional species related to the aforementioned, whose life histories are not known, also are described: *Paraeccopsis tanzanica* Aarvik, *P. addis* Aarvik, *P. turi* Aarvik, *P. botswanae* Aarvik, *P. pseudoinsellata* Aarvik, and *Coniostola laikipiana* Agassiz & Aarvik. *Endotera nodi* Agassiz is synonymised with *Endotera cyphospila* (Meyrick), comb. n.; and *Coniostola omistus* Diakonoff is synonymised with *Coniostola stereoma* (Meyrick). *Paraeccopsis inflicta* (Meyrick) and *Paraeccopsis atricapsis* (Meyrick) are removed from the synonymy of *Paraeccopsis insellata* (Meyrick). *Eucosma pharangodes* Meyrick is transferred to *Eucosmocystia* Diakonoff. *Age onychistica* Diakonoff is recorded from Africa for the first time.

Key words: acacia, Africa, *Coniostola*, *Endotera*, *Hystrichophora*, Lepidoptera, new species, *Paraeccopsis*, Tortricidae

Introduction

Between 2003 and 2007 the first author had the opportunity to sample Lepidoptera larvae on acacia (*Acacia* spp.; Fabaceae) in the Great Rift Valley of Kenya with the assistance of Earthwatch volunteers, under the leadership of Dr David Harper of the University of Leicester, the Principle Investigator of the project. Further research on the contents of domatia (swollen thorns) on some species of acacia was conducted in 2009–2011 with the assistance of Mary Ngugi and other Kenyan colleagues. The reared macrolepidoptera were listed by Agassiz & Harper (2009), and species inhabiting domatia were treated by Agassiz (2011). Jennifer Marohasy reared some species from acacia in 1990–1992, but the tortricids were neither identified nor included in her publication (Marohasy 1995). This paper brings together information on 19 Tortricidae species bred during those studies with some from earlier and later fieldwork. In the course of studying these moths we found several additional new species related to the acacia feeders in the genera *Paraeccopsis* and *Coniostola*, and these are also described.

Material and methods

During Earthwatch expeditions, volunteers searched acacia trees or bushes for evidence of spinings (leaf-rolls) which might contain Lepidoptera larvae. Any leaves showing signs of habitation were collected and later examined under a dissecting microscope in the laboratory. Inhabited spinings were kept in plastic boxes with a supply of the host plant until the emergence of adult moths. The same trees were surveyed using a beating tray, and any larvae discovered were cared for in the same way. Collections of flowers were made when available, and after the removal of stalks and other material which might rot, rearings were done in boxes in a similar manner. Swollen thorns (domatia) of acacia species which bore them were cut from the trees and opened to see whether any larvae were present. When possible, occupied domatia were re-sealed and retained until emergence of moths. Removal from

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