



Thailand Agromyzidae (Diptera)—2

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Abstract

The 29 species of the subfamily Agromyzinae in Thailand are revised, among these 13 species are described as new to science: *Melanagromyza ancyla* sp. nov., *M. catalexis* sp. nov., *M. cirrappendicula* sp. nov., *M. lumulata* sp. nov., *M. macilentata* sp. nov., *M. multistriata* sp. nov., *M. pandiculata* sp. nov., *M. sexseriata* sp. nov., *M. spinuliloba* sp. nov., *M. turgida* sp. nov., *Ophiomyia flagellata* sp. nov., *O. quadrifida* sp. nov., *O. striata* sp. nov.; and nine species (three species of *Agromyza*, two of *Melanagromyza* and four of *Ophiomyia*) are recorded as new to Thailand. One new synonym is established: *Melanagromyza cordiophoeta* Spencer, 1961, as a junior synonym of *M. dolichostigma* Meijere, 1922. Keys to the Thailand species of the genera *Agromyza*, *Melanagromyza* and *Ophiomyia* are given.

Key words: Agromyzidae, Diptera, *Agromyza*, *Melanagromyza*, *Ophiomyia*, Thailand, new species, new records

Introduction

The agromyzid fauna of Thailand has hitherto been poorly known. Spencer (1962b) described two new species, *Japanagromyza trientis* and *Phytobia maai* (as *Agromyza*), from Thailand, and Sasakawa (1962, 1963a) described four new species, *Cerodontha* (Cer.) *kirai*, *Japanagromyza incisa*, *Melanagromyza gressitti* and *M. yodai*, and recorded two species, *Melanagromyza metallica* (Thomson) and *Pseudonapomyza atrata* Malloch (as *Phytagromyza tibialis* Sasakawa) as new to Thailand. In a catalog of the Oriental Diptera: Agromyzidae by Sasakawa (1977), four further species, *Ophiomyia atralis* (Spencer), *Amauromyza aliena* (Malloch), *Pseudonapomyza spicata* (Malloch) and *Chromatomyia horticola* (Gourea) were added to the fauna. In 1981, a key to the 25 Thailand species (16 species of the subfamily Agromyzinae and nine species of the Phytomyzinae) was provided by myself. After that, Spencer (1986) confirmed the occurrence of 27 species, including six new species in this fauna: *Melanagromyza erawanensis* Spencer, *M. inthanonensis* Spencer, *M. passiae* Spencer, *M. pasiensis* Spencer, *Tropicomyia pilosa* Spencer and *Pseudonapomyza rampae* Spencer. However, it did not include all species known in Thailand. Recently, in my recent revision of the Oriental *Japanagromyza* (Sasakawa 2010), two new species were described: *J. browni* and *J. hymenoedemia*, and four new records for Thailand were recorded: *J. cupreata* Sasakawa, *J. duchesneae* (Sasakawa), *J. eucalypti* Spencer, and *J. setigera* (Malloch).

In this paper, the Thailand species of three genera, *Agromyza*, *Melanagromyza* and *Ophiomyia*, are revised: 10 new species of *Melanagromyza* and three new species of *Ophiomyia* are described, and nine species of the three above-mentioned genera are recorded in Thailand for the first time. The genus *Tropicomyia* was not treated herewith, because the fauna is still known only from the Afrotropical-Oriental leguminous leafminer, *T. vigneae* (Séguy, 1951) (Spencer 1986); one male from Ubon Ratchathani, coll 20.vii.2006, was examined. As the result, the agromyzid fauna in Thailand is represented by 73 species (subfamily Agromyzinae: 56 species, Phytomyzinae: 17 species) at present. Many further species of both subfamilies will be treated in succeeding papers.

Material and methods

Materials were examined from the Thailand TIGER project collection, deposited in the Natural History Museum of Los Angeles County (LACM), California, U.S.A. All the leaf- and stem-mining flies were collected using Malaise

and *ori* each two; *oh* reclinate, in row; ocellar triangle with ventral tip blunt, extending beyond level of second *ors*; lunule narrow, distinctly lower than semicircle, with median furrow; face with carina distinctly raised, forming a spindle below base of antennae; eye 1.2 times as high as wide; gena 1/5 as high as eye, projecting forwards, forming angle of 70° in front; vibrissal fasciculus 3/5 as long as srista, with slight upward curvature at base, straight apically. First antennal flagellomere round, with minute pile; arista appearing bare.

Mesoscutum with 0+2 *dc*, ten rows of *acr* anteriorly but eight rows behind level of anterior *dc*. Wing 1.8 mm long; costa extending to M₁, with three sections in proportion of 31:10: 7; r-m at distal 1/3 of discal cell (10 : 5); M₁ ratio 5.4; ultimate section of CuA₁ equal to penultimate section in length.

S6 about four times as long as S5, 1.3 times as wide as long, with posterior emargination on median 1/3. Epandrium with surstylus slightly projected, incurved, bearing three apical spines and four or five spinules; cercus small, 2/3 as high as epandrium. Hypandrium 280 µm long, with basal apodeme short, about 1/5 as long as sidearm. Phallapodeme 560 µm long; phallus 330 µm long, distiphallus striated distally on lateral side and spinulose internally; ejaculatory apodeme 160 µm long, blade very narrow, 35 µm wide.

Body length 2.0 mm.

FEMALE. Unknown.

Distribution. Thailand.

Remarks. On external characters this species resembles *Ophiomyia cornuta*, but it is easily distinguished by its broader facial carina, longer ultimate section of CuA₁, and striated distiphallus.

Etymology. The specific name refers to the striated (Latin: *striatus*) distiphallus.

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