

Classification of the Anthomyiidae from Korea (I)

(Diptera: Calyptratae)

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韓國產 꽃파리科 害虫의 分類 (I)

(隻翅目 : 有瓣類)

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ABSTRACT

This report deals with three species belonging to three genera of anthomyiid pests from Korea, among them one species is new to science as: *Emmesomyia koreana* n. sp., and two species are newly recorded from Korean fauna: *Meliniella luteipennis* (Ringdahl, 1950) and *Delia echinata* (Séguy, 1923).

INTRODUCTION

Most of the anthomyiid pests are phytophagous, in many cases feeding on the roots or fruits of the host plant and being leaf-miners, some of these are serious economic pests of agricultural crops and coniferous trees.

Nevertheless, the Anthomyiidae from Korea have been little known taxonomically. Up to now, so far as the authors aware, only thirteen species including undetermined one belonging to eight genera of this family have been recorded and arranged from Korean peninsula by Suwa (1981).

In this paper, the authors intend to add three species under three genera, of which one species is new to science and two species with two genera are new to Korean fauna. Accordingly, sixteen species under ten genera of the family are recorded from Kroea, as the result.

Before going further, the authors express their cordial thanks to Prof. C.E. Lee of Coll. Nat. Sci.

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All the material treated here are deposited in the collection of Syst. Ent. Lab., Coll. Agr., of the university.

DESCRIPTION

Genus Meliniella Suwa, 1974

대륙꽃파리屬(新稱)

Meliniella luteipennis (Ringdahl, 1950)

대륙꽃파리(新稱)

Meliniella luteipennis Ringdahl, 1950. Opusc. Ent. 15 : 189.

Meliniella watanabei Suwa, 1974. Ins. Mats. n.s. 4 : 45.

Meliniella luteipennis: Suwa, 1977. Ins. Mats. n. s. 10 : 3.

SPECIMEN EXAMINED: Mt. Obongsan, Gangweon Prov., C. Korea, 1 male, 17, V, 1981, coll. Y.J. Kwon.

DISTRIBUTION: Korea(new record), Japan,

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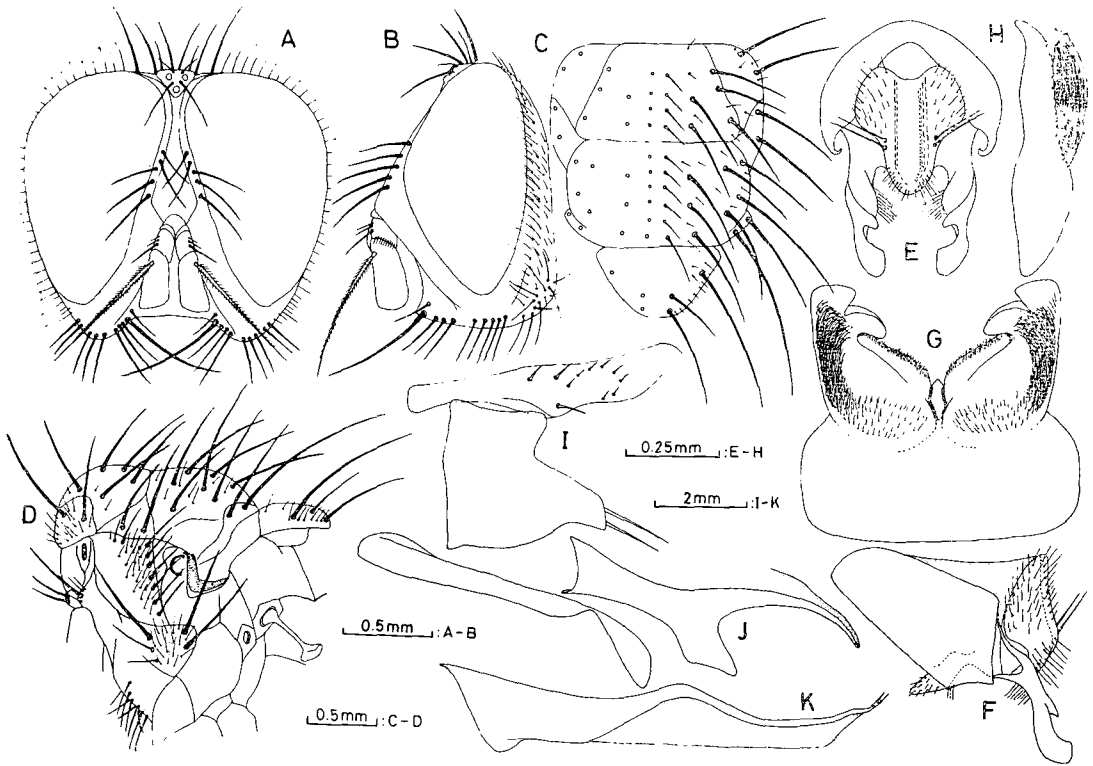


Fig. 1. *Meliniella luteipennis* (Ringdahl, 1950), male.

A: head, frontal view, B: ditto, lateral view, C: thorax, dorsal view, D: ditto, lateral view, E: hypopygium, dorsal view, F: ditto, lateral view, G: 5th sternite, ventral view, H: ditto, lateral view, I: pre- and postparamere, J: epi-, basiphallus and phallapodeme, K: distiphallus.

Sweden. Denmark, England, France, Spain.
HOST PLANT: Unknown.

Genus *Delia* Robineau-Desvoidy, 1830 고자리
꽃파리屬(新稱)

Delia echinata (Séguy, 1923) 별고자리꽃파리
(新稱)

Chortophila echinata Séguy, 1923. Ann. Soc. Ent.
Fr. 91 : 360.

Delia echinata: Suwa, 1974. Ins. Mats. n. s. 4 :
144.

SPECIMENS EXAMINED: Mt. Jirisan, Gyeongnam
Prov., S. Korea, 2 males, 14, VII, 1981, coll.
Y.J. Kwon; Mt. Palgongsan, Gyeongbug Prov., S.
Korea, 1 male, 23, V, 1981, coll. Y.J. Kwon;
Daegu, S. Korea, 1 male, 10, V, 1980, coll. Y.J.
Kwon.

DISTRIBUTION: Korea (new record), Japan, Europe,
North America, India.

HOST PLANTS: *Stellaria media*, *Spinacia olea-*
cea(?), *Dianthus caryophyllus*.

Genus *Emmesomyia* Malloch, 1917 우리꽃파리
屬(新稱)

Emmesomyia koreana sp. nov. 우리꽃파리(新稱)
Male: Body length 5.4~6.2mm, wing length 4.8
~5.5mm. General coloration black.

Head about 1.5 times as high as long; interfron-
talia very narrow, slightly dark brown; parafro-
ntalia whitish grey pollinose with 3~4 frontal setae;
parafacialia and gena also whitish grey pollinose
with 2~3 genal setae which are short and weakly
developed.

Thorax in pollinosity brownish grey; prescutum

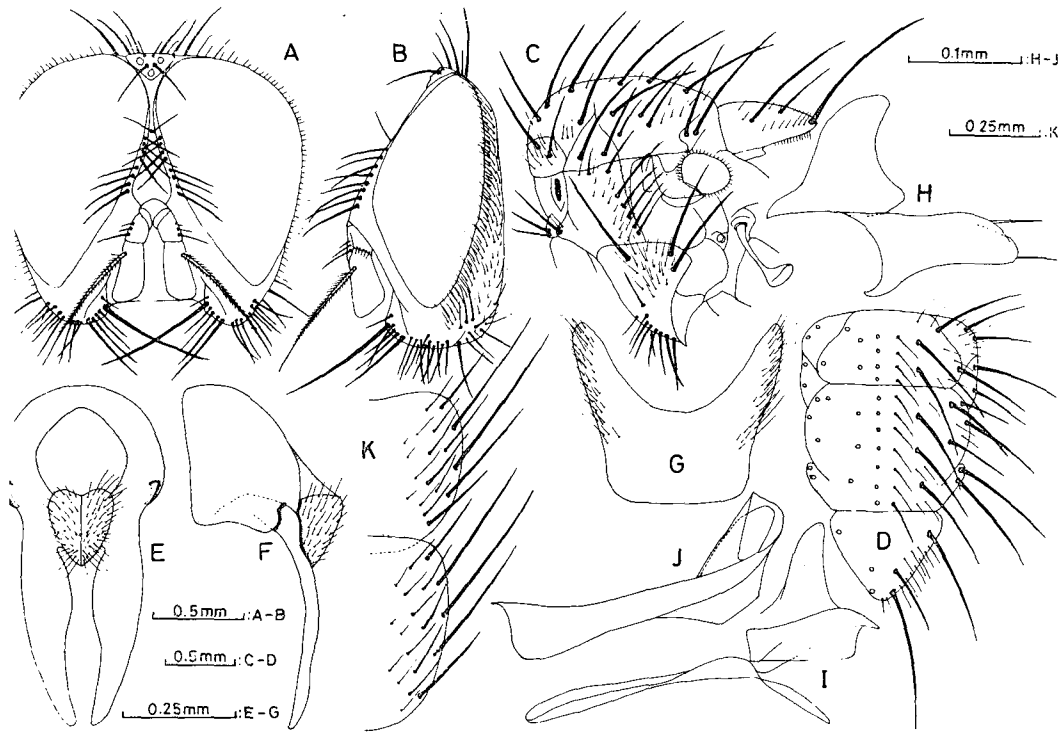


Fig. 2. *Delia echinata* (Séguy, 1923), male.

A: head, frontal view, B: ditto, lateral view, C: thorax, lateral view, D: ditto, dorsal view, E: hypopygium, dorsal view, F: ditto, lateral view, G: 5th sternite, ventral view, H: pre- and postparamere, I: epi-, basiphallus and phallapodeme, J: distiphallus, K: 3rd and 4th sternite.

with 3 acrostical setae, of which 2nd seta more developed than the others and even nearer to 1st than to 3rd; 2nd posthumeral seta and prealar seta short, weakly developed; pteropleuron with 1 seta.

Abdomen blackish with sparsely slight brownish grey pollinose.

Legs with femora black; tibiae light brownish yellow; tarsi dark brown; foretibia with 1 anterior seta and 1 anteroventral seta; middletibia with 1 apical anteroventral seta, 1 apical ventral seta, 1 posteroventral seta and 1 posterodorsal seta; hindtibia with 1 apical dorsal seta, 1 apical anteroventral seta, 3 anterodorsal setae, 1 anteroventral seta and 2 posterodorsal setae.

Male genitalia as figured. Surstylus with dorsal margin broadly and roundly produced, gently curved entad. Preparamere with a finger-like long process on

upper posterior margin, of which tip truncate, armed with a long macroseta; middle portion of posterior margin with a hook-like short process directed entad. Postparamere with a fingerlike short process on upper margin of apex. Epiphallus somewhat stout, shorter than basiphallus.

Female: Unknown.

SPECIMENS EXAMINED: Holotype male, Mt. Sobaeaksan, Gyeongbuk Prov., C. Korea, 15, V, 1981, coll. Y.J. Kwon; paratypes: 2 males, same data as holotype; Mt. Obongsan, Gangweon Prov., C. Korea, 17, V, 1981, coll. Y.J. Kwon.

HOST PLANT: Unknown.

摘 要

꽃파리類는 植物潛食害蟲으로서 그 經濟的 重要性이 크나, 우리나라産 꽃파리科에 대해서는 最近 Suwa

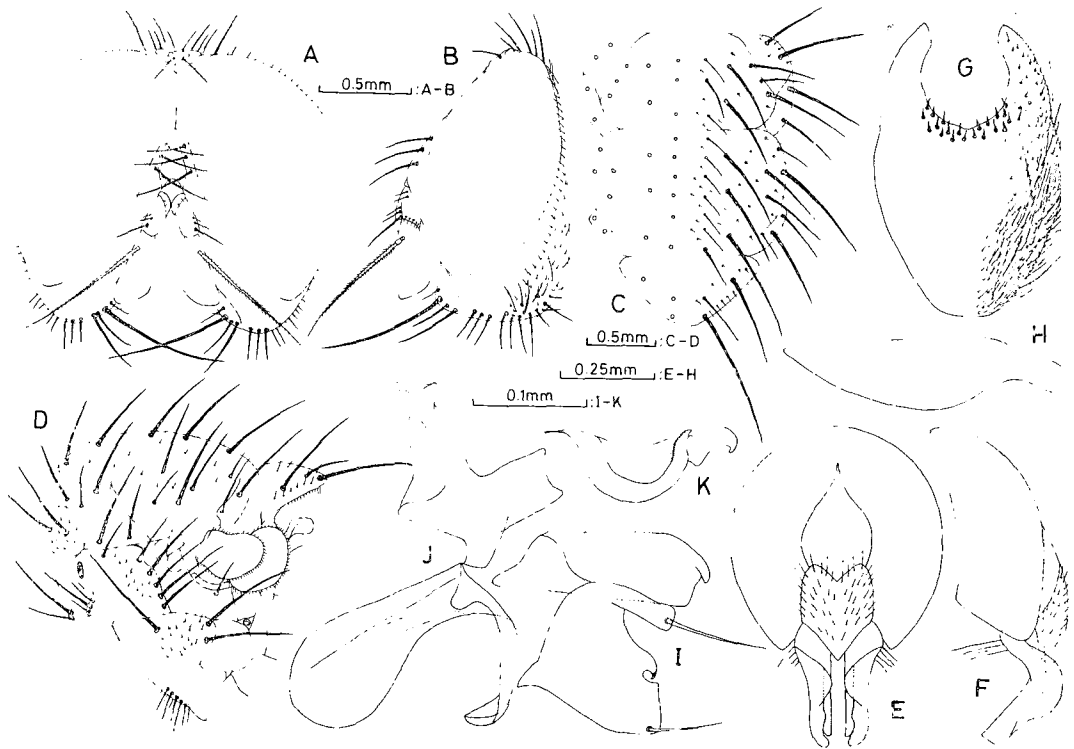


Fig. 3. *Emmesomyia koreana* sp. nov., male.

A: head, frontal view, B: ditto, lateral view, C: thorax, dorsal view, D: ditto, lateral view, E: hypopygium, dorsal view, F: ditto, lateral view, G: 5th sternite, ventral view, H: ditto, lateral view, I: pre- and postparamere, J: epi-, basiphallus and phallapodeme, K: distiphallus.

(1981)에 의해 총 8屬 13種(1未同定種)이 알려지고 있을 뿐 그 외에는 별로 研究된 바 없다. 著者들은 韓國産 꽃파리科 害虫의 系統分類學的 研究의 一環으로 정리하고 있던 중 새로이 3屬 3種을 發見하였기에 이에 報告코자 한다. 그 중 *Meliniella luteipennis*(Ringdahl, 1950)(대륙꽃파리, 新稱) *Delia echinata*(Séguy, 1923)(별고자리꽃파리, 新稱)는 韓國未記錄種이며 *Emmesomyia koreana* sp. nov.(우리꽃파리, 新稱)는 새로 新種으로 記載된다.

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