

Classification of the Anthomyiidae from Korea (II)

(Diptera: Calyptratae)

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ABSTRACT

In this paper, four species of the anthomyiid flies are reported for the first time in Korea, including two newly recorded genera as: *Chirosia cinerosa* (Zetterstedt, 1845) gen. et sp. hav. nov., *Paraprosalpia billbergi* (Zetterstedt, 1838) gen. et sp. hav. nov., *Lasiomma octoguttatum* (Zetterstedt, 1845) sp. hav. nov., and *Pegomya cunicularis* (Rondani, 1866) sp. hav. nov. Some male genitalic characters and head structures are figured respectively.

INTRODUCTION

Flies of *Pegomya* injurious to chenopodiaceous plants in Korea were formerly recorded as *Pegomya hyoscyami* (Panzer, 1809) by Yokoo (1940), but Suwa (1981) suggested that those flies in Korea might included at least two species-complex, for instance, *Pegomya exilis* and *P. cunicularis* as in case of Japan. Recently we have collected one of them, *P. cunicularis* which indeed recorded here as new to Korean fauna. We also have found three additional species with two hitherto unrecorded genera from Korea in the course of the survey continuously.

As the result, a total of twenty species under twelve genera of the family are known to occur in Korean fauna.

We express our cordial thanks to Mr. S. M. Lee, Nat. Sci. Museum, for his kind encouragements. Special thanks are due to Dr. P. Gilbert, Department

of Entomology, British Museum (Nat. Hist.), for the literature sending.

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

DESCRIPTION

Genus *Chirosia* Rondani, 1856 양치꽃파리屬(新稱)

***Chirosia cinerosa* (Zetterstedt, 1845)** 양치꽃파리(新稱)

Aricia cinerosa Zetterstedt, 1845. Dipt. Scand. 4 : 1450.

Hylemyia (Pycnoglossa) cinerosa: Hockett, 1949. Journ. N. Y. Ent. Soc. 57 : 59.

Chirosia cinerosa: Collin, 1955. Journ. Soc. Brit. Ent. 5 : 97.

MALE GENITALIA: Surstylus short and rather stout, apical margin broadly extending in profile,

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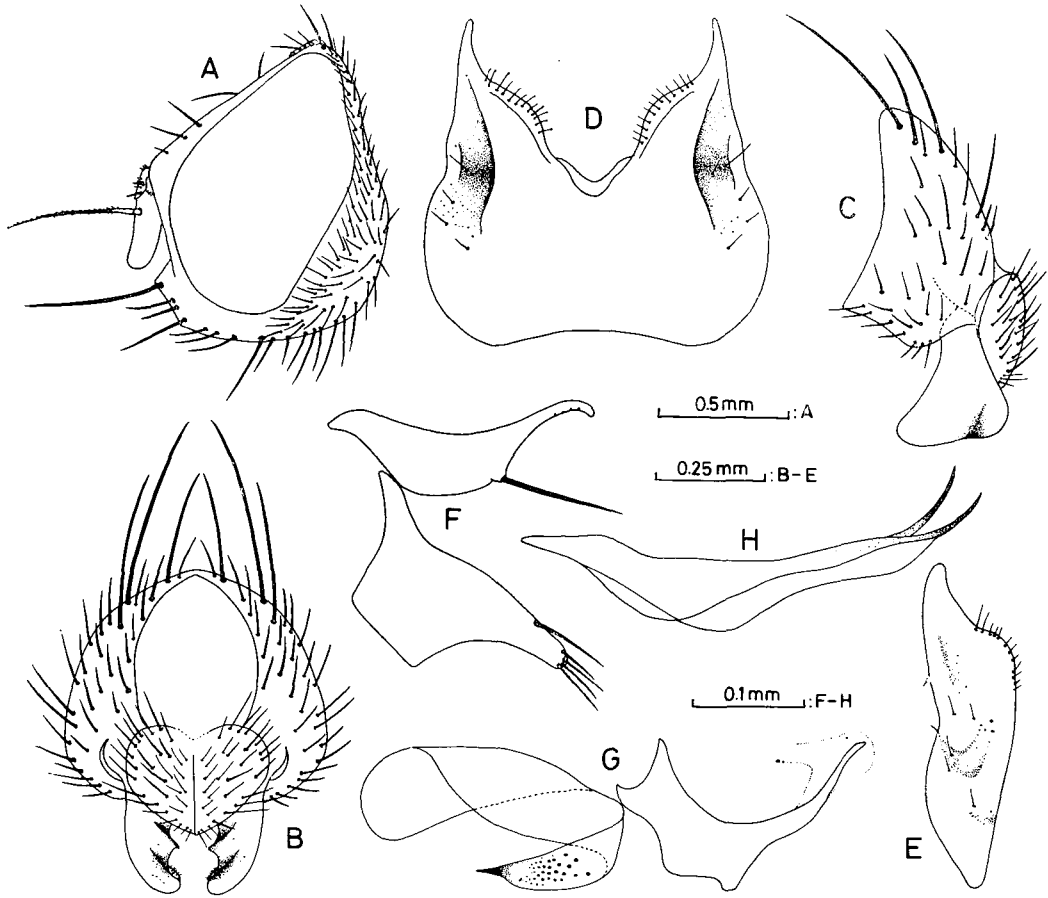


Fig. 1. *Chirosia cinerosa* (Zetterstedt, 1845), male. A: head, lateral view, B: hypopygium, dorsal view, C: ditto, lateral view, D: 5th sternite, ventral view, E: ditto, lateral view, F: parameres, lateral view, G: eip-, basiphallus and phallapodeme, lateral view, H: distiphallus, lateral view.

with inner side more or less produced at near middle. Cercal plate wider than long, somewhat heart-shape. Fifth sternite rather wide, armed with acute apical processes, bearing a series of short and minute setae on each inner margin. Preparamere with four setae at apex and single seta on upper margin of subapex. Postparamere armed with a long prominent macroseta on lower margin, with apex markedly slender and slightly curved downward. Distiphallus very long and slender, with apex sharply bifurcated.

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

DISTRIBUTION: Korea (new record), Japan, Europe.

HOST PLANT: *Struthiopteris* spp.

Genus *Paraprosalpia* Villeneuve, 1893 말꽃파리屬(新稱)

Paraprosalpia billbergi (Zetterstedt, 1838) 말꽃파리(新稱)

Anthomyza billbergi Zetterstedt, 1838. Ins. Lappon.: 678.

Paraprosalpia (*Paraprosalpia*) *billbergi*: Hennig, 1966. Flieg. Pal. Reg. 63a: 86-87.

MALE GENITALIA: Surstylus rather narrow and moderate long, with a hook-like short process directed entad on apex in profile. Cercal plate distinctly narrower than long, gently tapered to apex which sharply pointed. Fifth sternite relatively large, processes stratified on each inner margin, with somewhat

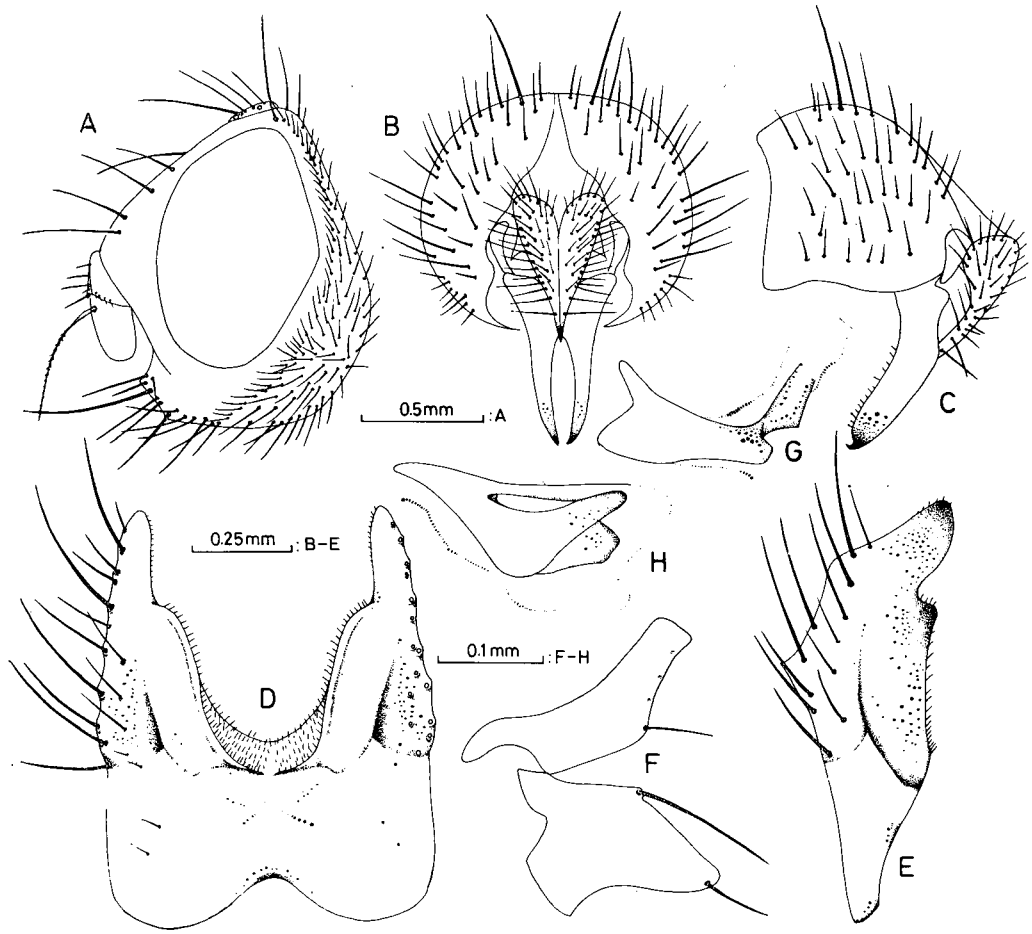


Fig. 2. *paraprosalpia billbergi* (Zetterstedt, 1838), male. A: head, lateral view, B: hypopygium, dorsalview, C: ditto, lateral view, D: 5th sternite, ventral view, E: ditto, lateral view, F: parameres, lateral view, G: epi- and basiphallus, lateral view, H: distiphallus, lateral view.

less acute tip. Preparamere armed with a strong macroseta on upper posterior margin, and a macroseta on lower posterior margin. Postparamere with a macroseta on lower margin; apex more or less blunt and truncate. Epiphallus apparently short and small, somewhat stout.

SPECIMEN EXAMINED: Daegu, S. Korea, 1 male, 22, III, 1982, coll. Y.J. Kwon; the same locality, 2 males, 26, III, 1982, coll. Y.J. Kwon.

DISTRIBUTION: Korea (new record), Japan, Europe.

HOST PLANT: Unknown in Korea.

Genus *Lasiomma* Stein, 1916 잎갈나무꽃파리屬 (新稱)

***Lasiomma octoguttatum* (Zetterstedt, 1845)** 소양꽃파리 (新稱)

Aricia octoguttata Zetterstedt, 1845. Dipt. Scand. 4 : 1570.

Lasiomma octoguttatum: Hennig, 1938. Flieg. Pal. Reg. 63a : 193.

MALE GENITALIA: Surstylus rather curved basally in lateral aspect, with apex twisted outward. Cercal plate somewhat subtriangular, with several microsetae at apex and three pairs of long setae on distal outer margin. Fifth sternite with process somewhat protruded at middle of each inner margin. Epiphallus rather slender and longer than basiphallus. Distiphallus long, slender, with apex sharply bifurca-

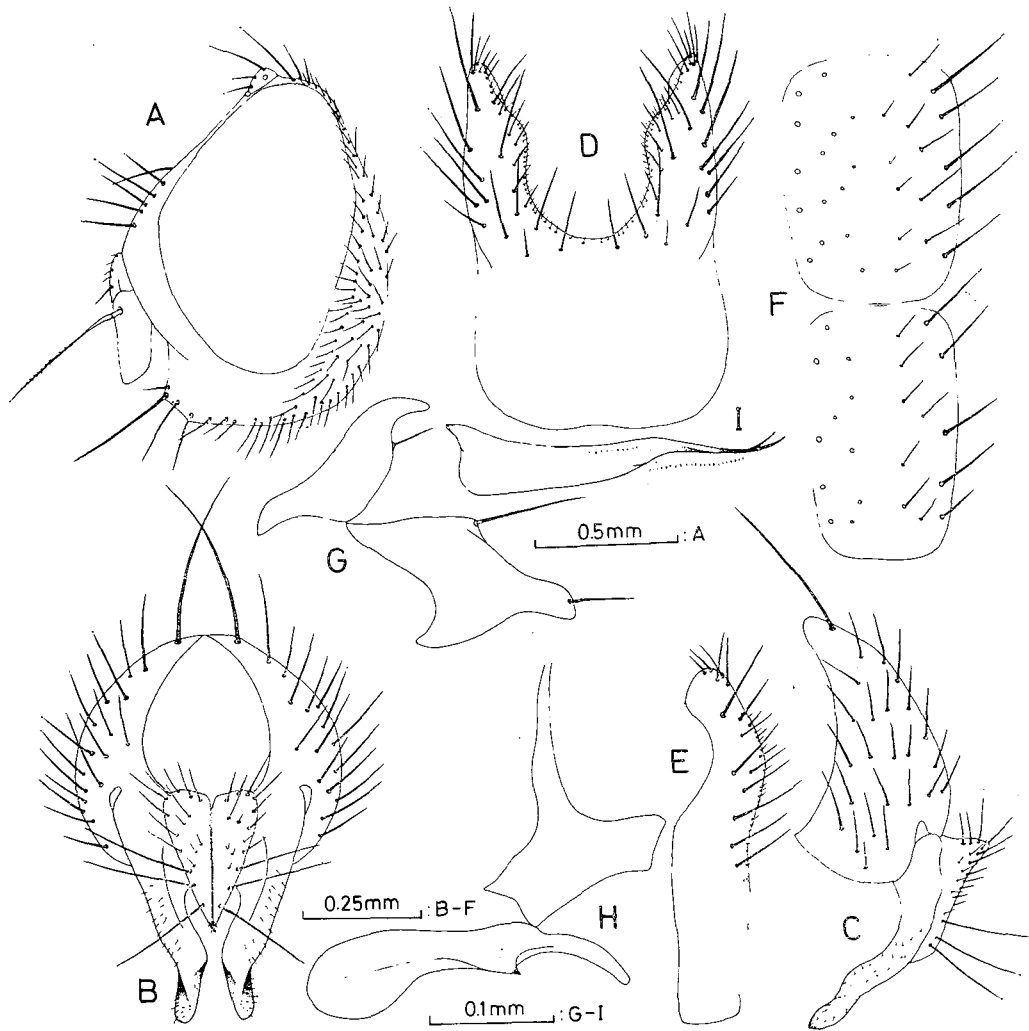


Fig. 3. *Lasiomma octoguttatum* (Zetterstedt, 1845), male. A: head, lateral view, B: hypopygium, dorsal view, C: ditto, lateral view, D: 5th sternite, ventral view, E: ditto, lateral view, F: 3rd and 4th sternite, ventral view, G: parameres, lateral view, H: epi-basiphallus and phallopodeme, lateral view, I: distiphallus, lateral view.

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

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

HOST PLANT: Unknown in Korea.

Genus *Pegomya* Robineau-Desvoidy, 1830 시금치꽃파리屬(新稱)

Pegomya cunicularis (Rondani, 1866) · 나도시금치꽃파리(新稱)

Chortophila cunicularis Rondani, 1866. Atti Soc. Ital. Sc. 9 : 163.

Pegomya betae (nec Curtis): Suwa, 1970. Kontyû 38 : 146-161.

Pegomya hyoscyami (partim): Hennig, 1973. Flieg. Pal. Reg. 63a : 576-588.

Pegomya mixta (nec Villeneuve): Suwa, 1974. Ins. Mats. n.s. 4 : 192.

Pegomya cunicularia (sic): Suwa, 1981. Kontyû 49 : 107.

MALE GENITALIA: Surstylus asymmetrical, diver-

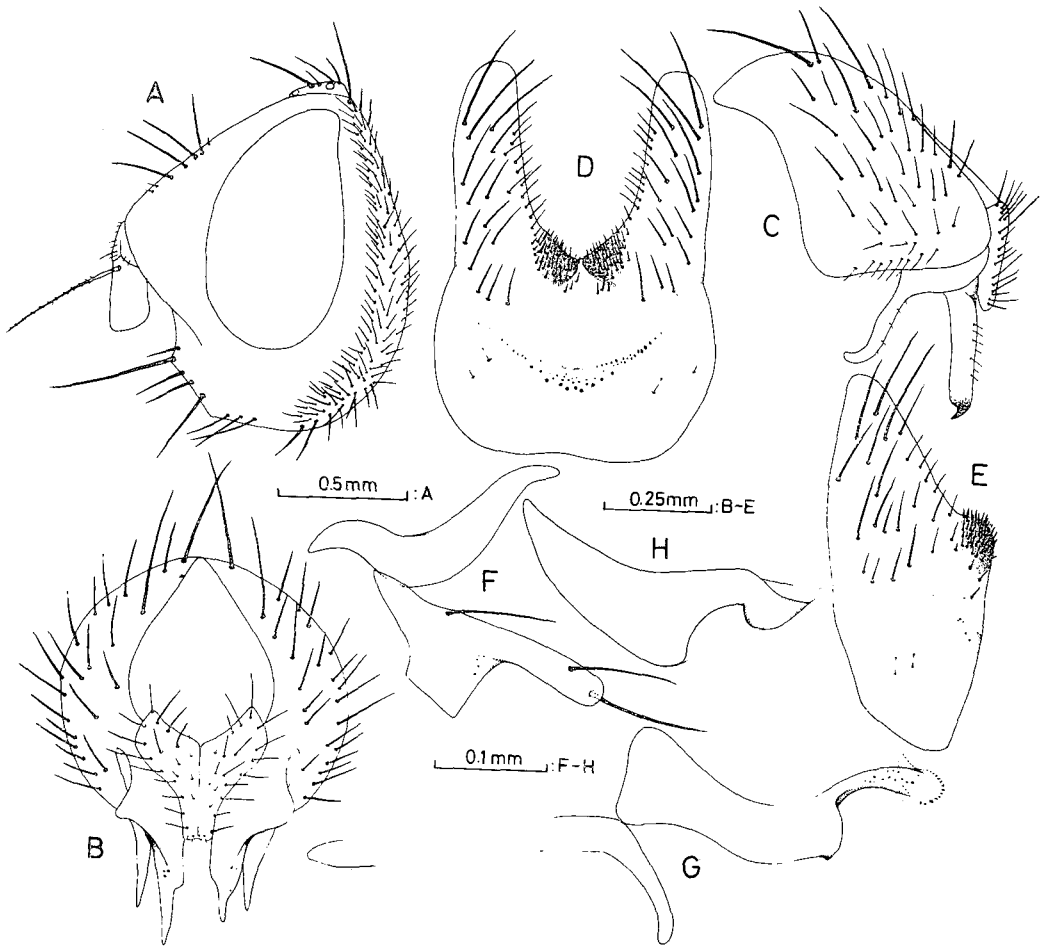


Fig. 4. *Pegomya cunicularis* (Rondani, 1866), male. A: head, lateral view, B: hypopygium, dorsal view, C: ditto, lateral view, D: 5th sternite, ventral view, E: ditto, lateral view, F: parameres, lateral view, G: epi-, basiphallus and phallapodeme, lateral view, H: distiphallus, lateral view.

ged at base of each process; anterior process a little narrower, gently curved basad at apex; posterior process armed with hook-like process at apex in profile; left posterior process longer than right one. Fifth sternite with processes simply long, more or less dully rounded at each apex; scattered with numerous short strong setae densely distributed on its inner margin. Preparamere with apex long slender, armed with a macroseta on one-third of upper margin, a macroseta on next to apex, and a macroseta on apex. Postparamere without prominent seta.

SPECIMEN EXAMINED: Mt. Geumsan, Gyeongnam Prov., S. Korea, 1 male, 1 female, 29, III, 1982.

coll. Y.J. Kwon; Bangoejin, Gyeongnam Prov., S. Korea, 1 male, 3 females, 10, IV, 1982, coll. Y.J. Kwon; Chilweon Myeon, Gyeongnam Prov., S. Korea, 2 females, 17, IV, 1982, coll. Y.J. Kwon; Daegu, S. Korea, 3 females, 22, IV, 1982, coll. Y.J. Kwon.

DISTRIBUTION; Korea (new record), Japan, North Africa, Europe, North America.

HOST PLANT: *Atriplex subcordata*, *Beta vulgaris*, *Chenopodium album*, *C. ficifolium*, *C. glaucm*, *Spina-cia oleracea*.

摘 要

著者들은 韓國産 꽃파리科 昆虫의 系統分類學의 研究

의 一環으로 調査 整理중 새로이 未記錄種, *Chirosia cinerosa* (Zetterstedt, 1845) (양치꽃파리, 新稱), *Paraprosalpia billbergi* (Zetterstedt, 1838) (밭꽃파리, 新稱), *Lasiomma octoguttatum* (Zetterstedt, 1845) (소양꽃파리, 新稱), *Pegomya cunicularis* (Rondani, 1866) (나도시금치꽃파리, 新稱)을 發見하였으며, 그중 *Chirosia* (양치꽃파리屬, 新稱), *Paraprosalpia* (밭꽃파리屬, 新稱)屬은 우리나라에서 처음 記錄된다. 또한 지금까지 시금치類를 加害하는 시금치꽃파리는 *Pegomya hyoscyami* (Panzer, 1809)로 記錄되고 있으나, Suwa (1981)에 의하면 *P. exilis* (Meigen, 1826) 및 *P. cunicularis* (Rondani, 1866)도 混同 使用되어지고 있을 可能性을 示唆하였는데 이들 중 現在 *P. cunicularis* (Rondani, 1866)을 發見하였기에 이에 報告코자 한다.

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