

Classification of the Anthomyiidae from Korea (III)

(Diptera: Calyptratae)

Yong Jung Kwon and Sang Jae Suh

韓國產 꽃파리科的 分類 (Ⅲ)

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ABSTRACT

One new species and three newly recorded species of anthomyiid flies from Korea are treated as: *Meliniella sobaeksana* sp. nov., *Fucellia apicalis* Kertész, 1908 gen. et sp. hav. nov., *Fucellia kamtchatica* Ringdahl, 1930 gen. et sp. hav. nov., and *Delia robustiseta* Judin, 1974 sp. hav. nov. Some male genitalic characters are given here respectively.

INTRODUCTION

In the course of the survey on the anthomyiid flies in Korea, we have found one species new to science and three hitherto unrecorded species from Korea, including one newly recorded genus: *Fucellia* Robineau-Desvoidy, 1842. So, as for the Korean fauna, a total of twenty three species under thirteen genera of the family become recognized to occur.

We wish to express our cordial thanks to Prof. Y.E. Choi, Coll. Agr., of Kyungpook Nat. Univ., for his kind guidance. We are also grateful to Dr. P. Gilbert, Department of Entomology, British Museum (Nat. Hist.), for constant kindness in huge literature.

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

DESCRIPTION

Genus *Fucellia* Robineau-Desvoidy, 1842 해변
꽃파리屬(新稱)

***Fucellia apicalis* Kertész, 1908** 절박이해변꽃파
리(新稱)

Fucellia apicalis Kertész, 1908. Wien. Ent. Ztg. 17: 17.

MALE GENITALIA: Surstylus with a series of setae on inner margin and roundly produced process at near base. Cercal plate roundly produced at apex, with a small process on each outer margin. Anal sclerite sunken on upper side with numerous strong setae. Fifth sternite somewhat rectangularly emarginated at middle distad. Preparamere rather square in lateral view and armed with two strong macrosetae on posterior margin. Postparamere very largely developed, with apex more or less spatulate. Epiphallus very small conical, and degenerated. Basiphallus somewhat broad triangular. Distiphallus

Dept. of Agricultural Biology, Coll. of Agriculture, Kyungpook Nat. University, Daegu 635, Korea.

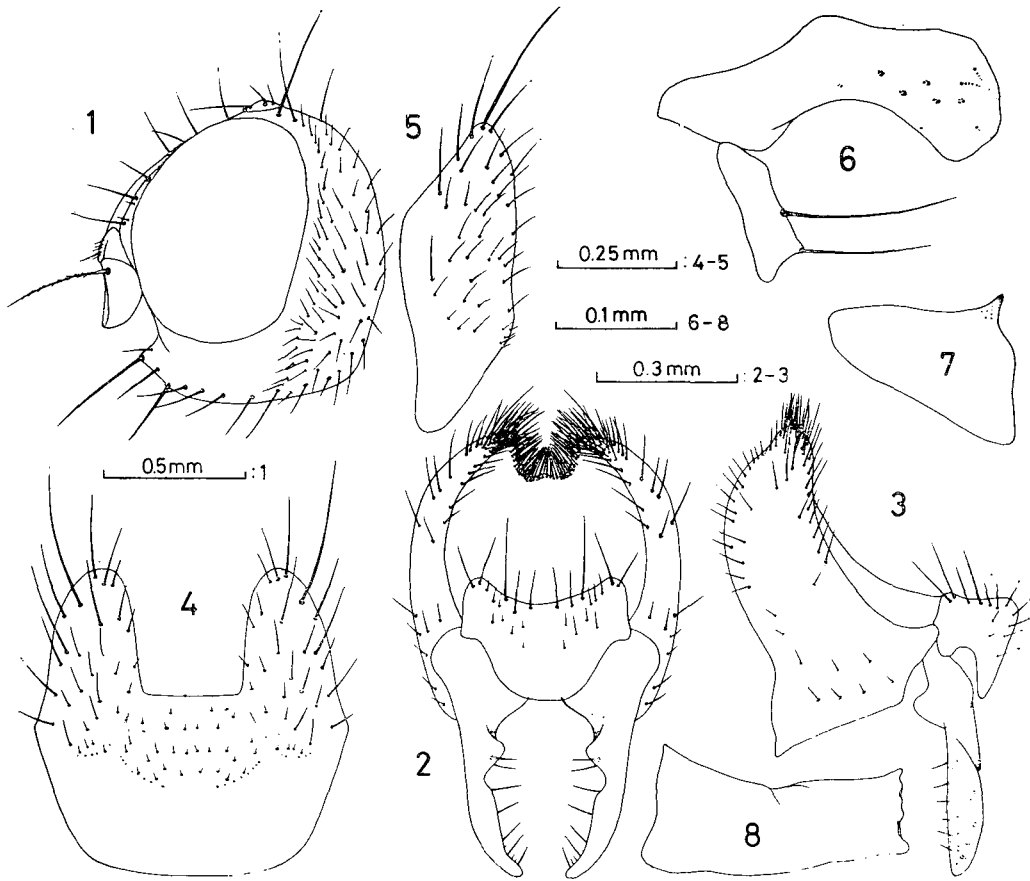


Fig. 1. *Fucellia apicalis* Kertész, 1980, male. 1: head, lateral view, 2: hypopygium, dorsal view, 3: ditto, lateral view, 4: 5th sternite, ventral view, 5: ditto, lateral view, 6: parameres, lateral view, 7: epi- and basiphallus, lateral view, 8: distiphallus, lateral view.

rather stout tubular.

SPECIMEN EXAMINED: Bangeojin, Gyeongnam Prov., S. Korea, 5 males and 3 females, 10, IV, 1982, coll. Y.J. Kwon; Yangnam Myeon, Gyeongbug Prov., S. Korea, 20 males and 15 females, 16, VI, 1982, coll. Y.J. Kwon; Ganggu Myeon, Gyeongbug Prov., S. Korea, 10 males and 9 females, 19, VI, 1982, coll. Y.J. Kwon; Sokcho City, Gangweon Prov., C. Korea, 10 males and 12 females, 31, VII, 1982, coll. Y.J. Kwon; Naksan Beach, Gangweon Prov., C. Korea, 5 males and 7 females, 31, VII, 1982, coll. Y.J. Kwon.

DISTRIBUTION: Korea (new record), Japan, Is. Bonin, China.

HOST PLANT: Living on animal or plant orga-

nisms casted in the tidal zone, but unknown in living plants.

***Fucellia kamtchatica* Ringdahl, 1930** 해변꽃파리 (新稱)

Fucellia kamtchatica Ringdahl, 1930. Ark. Zool. 21A : 7.

Protofucellia syuitimorii Seguy, 1936. Bull. Soc. Ent. Fr. : 282.

Fucellia kamtchatica+*F. syuitimorii*: Hennig, 1966. Flig. Pai. Reg. 63a : 14, 18.

Fucellia kamtchatica: Suwa, 1974. Ins. Mats. n. s. 4 : 18.

MALE GENITALIA: Surstyus slender and rather straight. Cercal plate with apex bifurcated, of which processes with two long setae. Anal sclerite with a

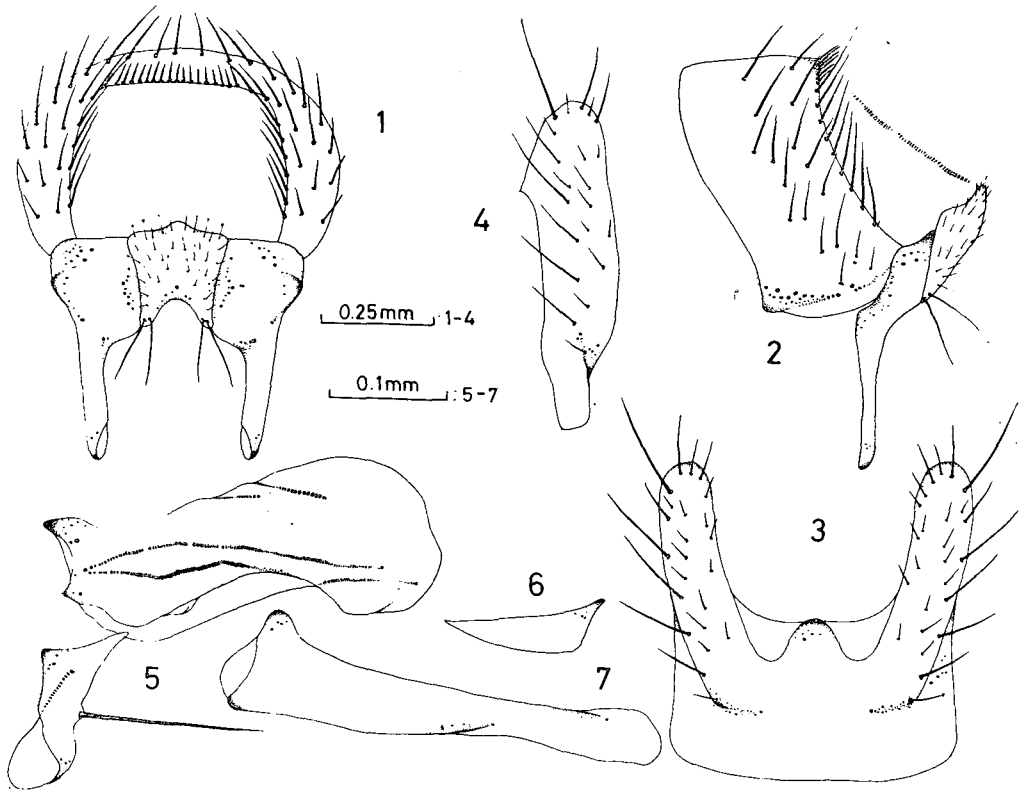


Fig. 2. *Fucellia kamchatica* Ringdahl, 1930, male. 1: hypopygium, dorsal view, 2: ditto, lateral view, 3: 5th sternite, ventral view, 4: ditto, lateral view, 5: parameres, lateral view, 6: epi- and basiphallus, lateral view, 7: distiphallus, lateral view.

series of slightly longer setae on laterocaudal margin, and strong shorter setae on upper caudal margin. Fifth sternite with slender processes and roundly produced at inner basal side. Preparamere wider than long, with one strong macroseta. Postparamere prominent, largely developed. Epiphallus legenerated; basiphallus small and somewhat triangular. Distiphallus distinctly long and slender.

SPECIMEN EXAMINED: Yangnam Myeon, Gyeongbuk Prov., S. Korea, 70 males and 55 females, 16, VI, 1982, coll. Y.J. Kwon; Ganggu Myeon, Gyeongbuk Prov., S. Korea, 80 males and 70 females, 19, VI, 1982, coll. Y.J. Kwon; Sokcho City, Gangwon Prov., C. Korea, 15 males and 13 females, 31, VII, 1982, coll. Y.J. Kwon; Naksan Beach, Gangwon Prov., C. Korea, 5 females, 31, VII, 1982, coll. Y.J. Kwon.

DISTRIBUTION: Korea (new record), Japan, Kamchatka, Is. Aleutian, Alaska.

HOST PLANT: Living on animal or plant organisms casted in the tidal zone, but unknown in living plants.

Genus *Meliniella* Suwa, 1974 대목꽃파리屬

Meliniella iobaeksana sp. nov. 소백대목꽃파리 (新稱)

MALE GENITALIA: Surstylus with three pairs of processes: in dorsal view, the first process roundly extending; the second process somewhat rectangular, directed entad; the third process curved entad and more narrowly pointed. Cercal plate ribbon shaped, somewhat constricted at middle, with a series of setae on each apical margin. Fifth sternite rather broad, with processes dully rounded at each apex, with inner basal margin broadly and roundly extending. Preparamere with apex slightly extending obliquely, armed with nine macrosetae at apex, and one macroseta on near apex. Postparamere slender with one prominent macroseta on lower margin.

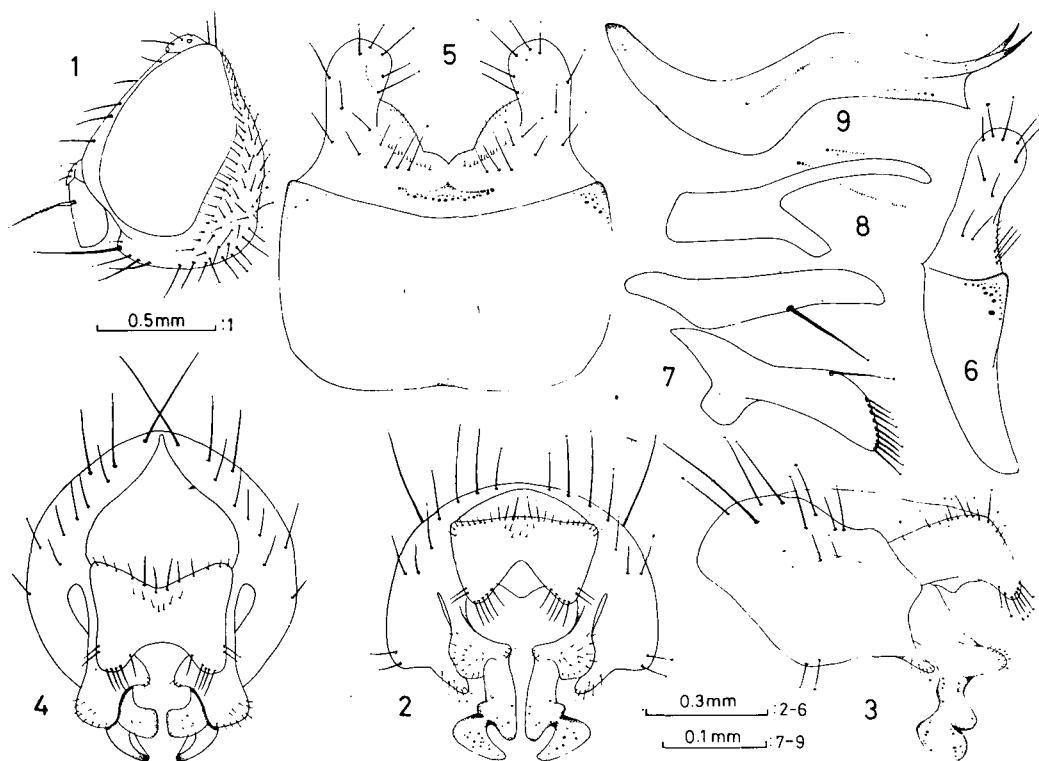


Fig. 3. *Meliniella sobaeksana* sp. nov., male. 1: head, lateral view, 2: hypopygium, caudal view, 3: ditto, lateral view, 4: ditto, dorsal view, 5: 5th sternite, ventral view, 6: ditto, lateral view, 7: parameres, lateral view, 8: epi- and basiphallus, lateral view, 9: distiphallus, lateral view.

Epiphallus very long and simply slender, with apex roundly terminate; basiphallus distinctly less than epiphallus. Distiphallus wavyly bisinuate, with apex relatively shortly bifurcate.

SPECIMEN EXAMINED: Holotype male, Mt. Sobaeksan, Gyeongbug Prov., S. Korea, 15, V, 1981, coll. Y.J. Kwon; paratype: 1 male, same data as holotype.

HOST PLANT: Unknown.

REMARKS: This new species resembles *Meliniella sikisima* Suwa, 1974, but is separated well from it by the male genitalia.

Genus *Delia* Robineau-Desvoidy, 1842 고자리꽃파리屬

***Delia robustiseta* Judin, 1974** 극동고자리꽃파리(新稱)

Delia robustiseta Judin, 1974. Biol. Nauki. 17: 23.

Delia takizawai Suwa, 1974. Ins. Mats. n. s. 4: 155. (syn. nov.)

MALE GENITALIA: Surstylus with anterior and posterior margin a little roundly and broadly extending in lateral aspect, more roundly produced on inner side in dorsal view. Cercal plate rather lemon shaped, armed with many long macrosetae on distal portion. Fifth sternite armed with one prominent macroseta on each apex and three shorter strong setae on each small process of inner subapical margin, outer margin of each process furnished with five macrosetae of which the first is usually longer. Preparamere with two weak setae on apical margin, but postparamere disarmed, and simply narrowed. Epiphallus somewhat hyaline, membranous; distiphallus slender with sharply bifurcated apex.

SPECIMEN EXAMINED: Mt. Soyosan, Gyeonggi Prov., C. Korea, 21 males, 15, V, 1982, coll. Y.J. Kwon.

DISTRIBUTION: Korea (new record), Japan, U.S.S.R. (Ussuri Bay, Transbaikalia).

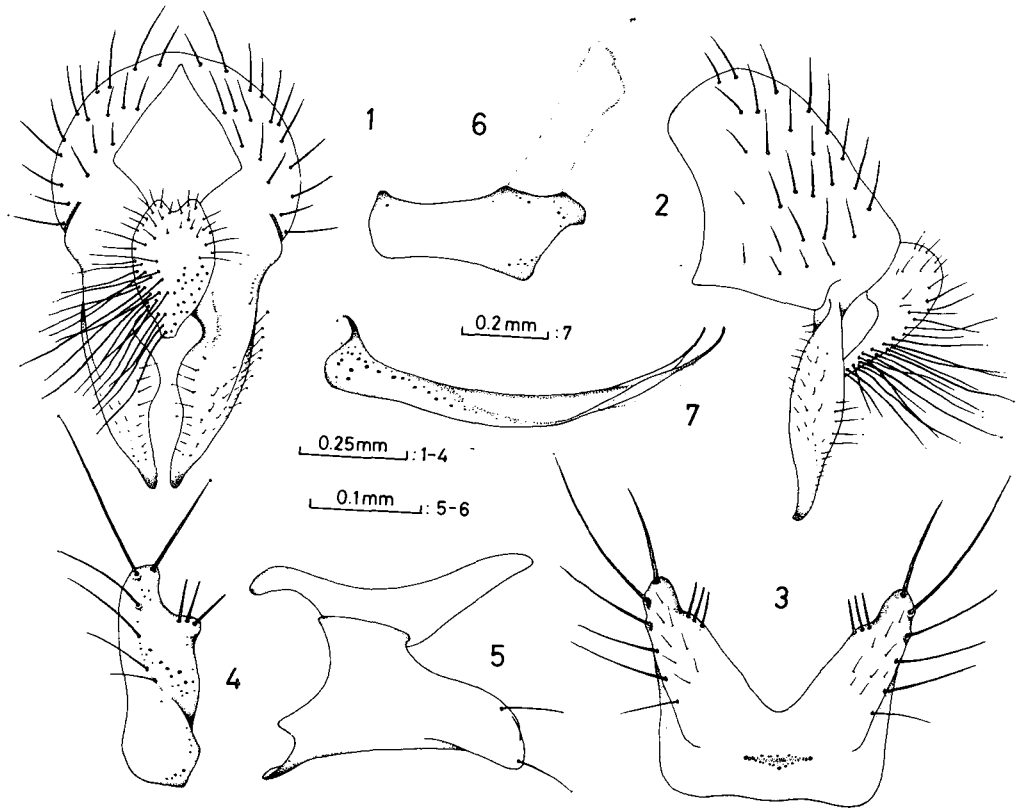


Fig. 4. *Delia robustiseta* Judin, 1974, male. 1: hypopygium, dorsal view, 2: ditto, lateral view, 3: 5th sternite, ventral view, 4: ditto, lateral view, 5: parameres, lateral view, 6: epi- and basiphallus, lateral view, 7: distiphallus, lateral view.

HOST PLANT: Unknown in Korea.

Recently, Judin (1974) described the above species based on the material from Ussuri Bay and Trassbaikalia, U.S.S.R., and at the same year Suwa described *Delia takizawai* from Hokkaido, Honshu and Kyushu, Japan, as new to science respectively but we couldn't find any differences between them, so, *Delia takizawai* is a junior synonym of the above species judging from the external feature and male genitalic characters, by the publication priority.

摘 要

韓國産 꽃파리科 昆虫의 系統分類學의 研究, 調査 整理中 새로이 1新種, *Meliniella sobaeksana* sp. nov. (소백대북꽃파리, 新稱)와 3未記錄種, *Fucellia apicalis* Kertész, 1908 (절박이해변꽃파리, 新稱), *Fucellia kamtschatica* Ringdahl, 1930 (해변꽃파리, 新稱),

Delia robustiseta Judin, 1974 (극동고자리꽃파리, 新稱)을 發見하였으며, *Fucellia* Robineau-Desvoidy, 1842 (해변꽃파리屬, 新稱)은 우리나라에서 처음 記錄된다. 따라서 韓國産 꽃파리는 總 13屬 23種이 된다.

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