

Two Newly Recorded Species of Andrenidae (Hymenoptera: Apoidea) from Korea

한국산 애꽃벌과(벌목: 꿀벌상과)의 2 미기록종

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Abstract – Two species belonging to the genus *Andrena* are recorded for the first time in Korea. They are *Andrena fukuiana* Hirashima et Haneda of the subgenus *Larandrena* and *Andrena luridiloma* Strand of the subgenus *Euandrena*.

Key Words – Taxonomy, Hymenoptera, Apoidea, Andrenidae, *Andrena*, Korea

초 록 – 한국산 애꽃벌과에 대한 분류 연구 중 2001년도에 채집된 표본 중에서 *Larandrena* 아속의 *Andrena fukuiana* Hirashima et Haneda와 *Euandrena* 아속의 *Andrena luridiloma* Strand 두 종이 새로 분류 동정되어 이에 보고한다.

검색어 – 분류, 벌목, 애꽃벌과, *Andrena*, *Larandrena*, 한국

Fifty species of the family Andrenidae from Korea were recorded, according to studies by Kim (1995) and Tadauchi *et al.* (1997). Among the Andrenidae specimens which collected from March 2,000 to September 2,001, two were identified as unrecorded species in Korea. *Andrena fukuiana* Hirashima et Haneda was rarely collected in Suweon March to early April, and the subgenus *Larandrena* containing it was also recorded for the first time in Korea. *Andrena luridiloma* Strand was collected in Yongpyeong in April. *A. luridiloma* was the 4th member of the subgenus *Euandrena* in Korea.

tens Insectorum Classes, Ordines, Genera, Species, Adiectis Synonymis, Locis, Descriptionibus, Observationibus. xxviii+832pp.: 376.

Type species: *Apis helbola* Linnaeus, 1758.

Subgenus *Larandrena* Laberge

Andrena (Larandrena) Laberge, 1964. Bul. the Univ. Nebraska St. Mus. 7: 304.

Type species: *Andrena miserabilis* Cresson, 1872.

Andrena (Larandrena) fukuiana Hirashima et Haneda, 1973 이 큰봄애꽃벌(신칭) (Figs. 1-6)

Andrena fukuiana Hirashima et Haneda, 1973. Mushi 47: 67~73.

Description: Female-Small sized species, 8-9 mm. Mandible black. Process of labrum small, tapering apex with apical margin entire. Clypeus black, tessellate

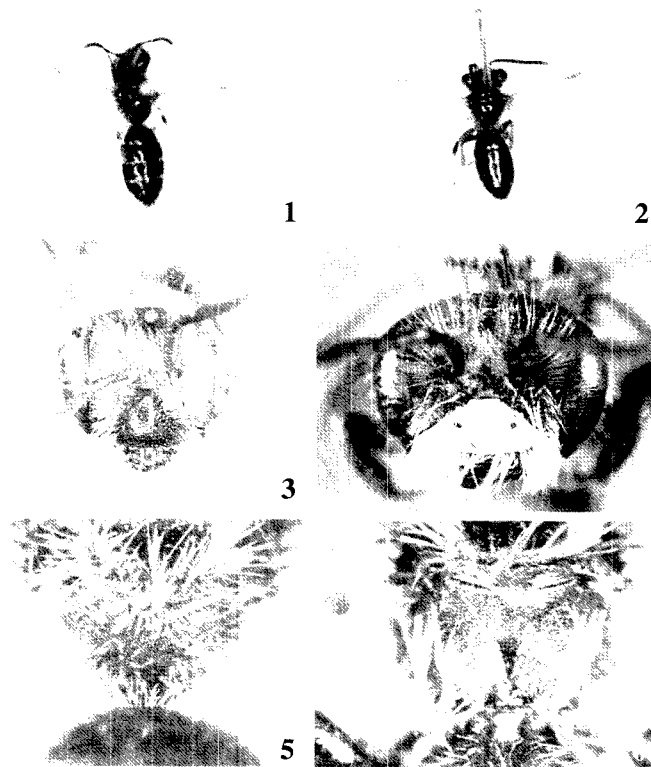
Taxonomic Account

Genus *Andrena* Fabricius, 1775

Andrena Fabricius, 1775. Systema Entomologiae, Sis-

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Figs. 1-6. *Andrena fukuiana* Hirashina et Haneda; 1, 3, 5: Female; 2, 4, 6: Male; 1, 2: Dorsal view; 3, 4: Frontal view of head; 5, 6: Propodeal enclosure.

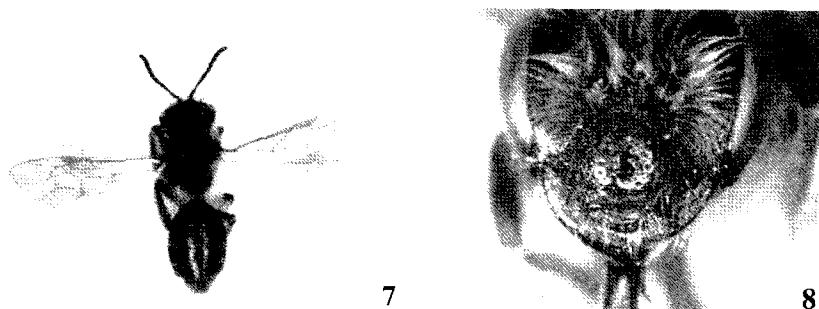
basally with median shiny region impunctate or sparsely punctate. Antenna black, 3-10 segments of flagella distinctly reddish brown beneath. First segment of flagella as long as twice of width, and about equal to next two segments together. Facial fovea fuscous above and yellowish below, and separated from the margin of compound eye by a shiny space. Hairs on head yellowish grey not mixed with dark one. Mesoscutum tessellate with slightly shiny region in middle. Scutellum nearly smooth, shiny and unshagreened at least medially. Propodeum tessellate. Propodeal enclosure poorly defined and tessellate except basal area wrinkled. Hairs on the thorax yellowish white, not mixed with dark one. Wing veins and stigma pale yellowish brown. Propodeal corbicula developed; the anterior and dorsal margin with long and dense branched hairs, the interior without hair. The hairs in tibial scopa weakly plumose throughout with whitish branched hairs. The trochanteral and femoral floccus with white dense and branched hairs.

Metasomal terga weakly tessellate with very small and sparse punctures, very polished. Metasomal terg-

um 1 covered with very sparse hairs; apical margin with whitish appressed hair fringe laterally. Metasomal terga 2-4 with densely whitish appressed hair bands interrupted in middle.

Male-Smaller than female, 5-6 mm. Mandible black, in apex reddish brown. Mandibles long and sickle-shaped, apices more crossed over one another. Clypeus broader than length, and weakly tessellated with sparse punctures; color yellowish with two black spots; hairs on clypeus long whitish downwardly. Paraocular region not yellow. Antenna black, flagella except 1st segment beneath pale reddish brown. Hairs on head long, whitish yellow. Mesonotum tessellate except for medio-apical area polish. Scutellum polish without punctures at least medially. Propodeal enclosure tessellate, basally wrinkled. Hairs on thorax sparse and yellowish white. Legs black except for tarsi ferruginous. Metasomal terga weakly tessellate and polished with very sparse short hairs. Metasomal terga 2-4 with white hair bands interrupted in middle.

Materials examined: GG-3 ♂♂, Seodundong Suweon, 5 IV 2001, H.S. Lee (on *Rhododendron mucronulatum*



Figs. 7-8. *Andrena luridiloma* Strand; 7: Dorsal view of female; 8: Clypeus of female.

Turcz.); 1 ♀, Seodundong Suweon, 20 IV 2000, Y.B. Lee (on *Forsythia koreana* Nakai).

Distribution: Korea (Suweon), Japan.

Floral record: *Buxus microphylla* Siebold & Zuccarini var. *koreana* Nakai (회양목), *Rhododendron mucronulatum* Turcz (진달래), *Forsythia koreana* Nakai (개나리).

Subgenus *Euarandrena* Hedicke

Andrena (*Euandrena*) Hedicke, 1933. Mitt. Aus dem Zool. Mus. In Berlin 19: 213.

Type species: *Andrena bicolor* Fabricius, 1775.

Andrena (*Euandrena*) *luridiloma* Strand, 1915

작은털애꽃벌(신칭) (Figs. 7, 8)

Andrena luridiloma Strand, 1915, Ent. Mitt., 4: 72-73;

Xu and Tadauchi. 1998. ESAKIA, 38: 89-103.

Description: Female- Small species, 9 mm. Process of labrum medium sized and broader than length. Clypeus well convex, tessellate and rather densely punctate; punctures at medio-apically sparser. Antenna blackish, under part dark reddish brown. Hairs on head sparse and yellowish, mixed with yellowish brown hairs on antennal and vertex area. Mesoscutum tessellate except for medio-apical region polished. Scutellum tessellate and punctate marginally and smooth and polished medially. Propodeum tessellate and sculptured. Enclosure roughened basally narrowly, tessellate apically. Hairs on thorax dense, fulvous, paler below. Tibial scopal hairs well developed, with long, simple white hairs.

Metasomal terga 1 polished basally, tessellate apically. Metasomal terga 2-4 tessellate and punctate basally and non-punctate apically with non compacted white hair bands interrupted in middle. Posterior margins of metasomal terga narrowly reddish brown.

Male: not available.

Materials examined: 1 ♀, 23 IV 1996, Yongpyeong, Lee, H.S.

Distribution: Korea (Yongpyeong), Japan, China.

Floral record: *Rhododendron mucronulatum* Turcz (진달래).

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