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## A New Species of the Genus *Andrena* from Japan (Hymenoptera, Andrenidae)

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**Abstract.** A new species, *Andrena (Andrena) katakuri*, is described from Japan.

**Key words:** taxonomy, Hymenoptera, Andrenidae, *Andrena*, new species, Japan.

We found a new species of the genus *Andrena* belonging to the subgenus *Andrena* which flies early to mid April and mainly associated with *Erythronium japonicum* Decne.

***Andrena (Andrena) katakuri* sp. nov.**  
(Japanese name: katakuri-hime-hanabachi)  
(Figs. 1 & 2)

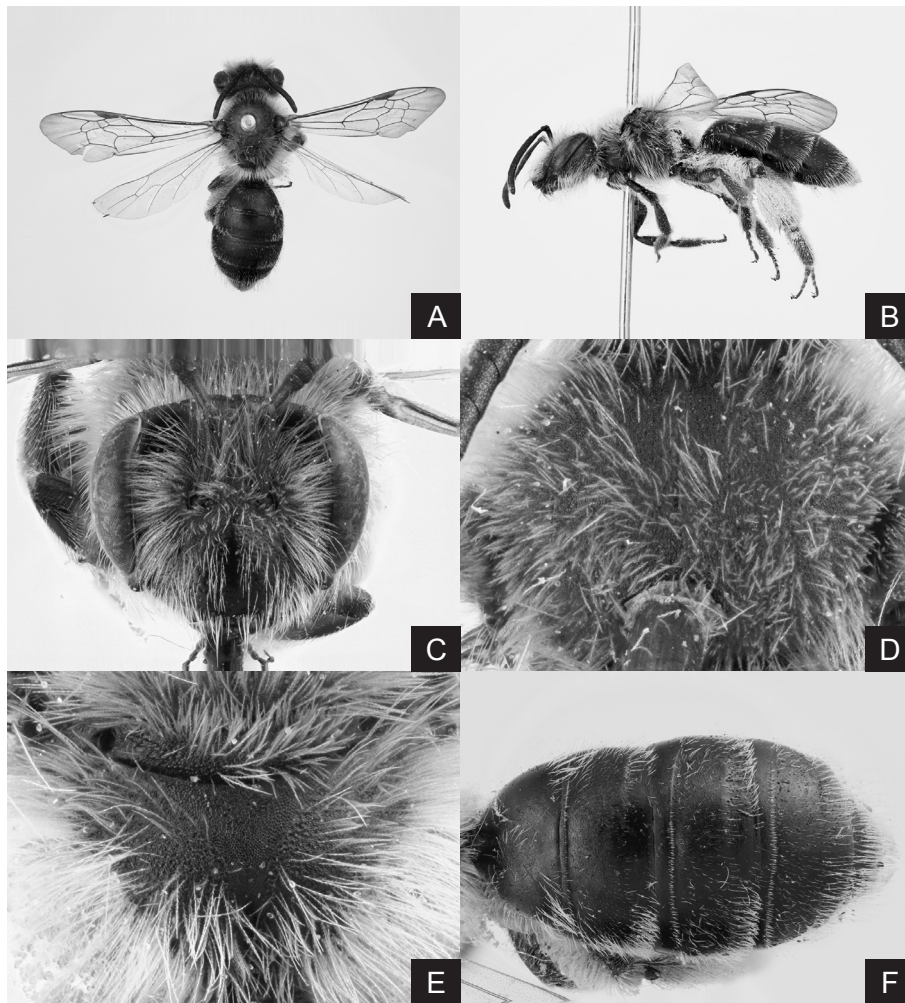
**Female.** BL 9.8-10.0 mm; WL 7.6-7.9 mm (n = 4).

**Color.** Flagellum brownish beneath; mandible with apical third reddened; wing membranes subhyaline, slightly brownish, veins and pterostigma brown; tibial spurs yellowish; posterior margins of terga brown transparent.

**Pubescence.** Hairs on head dense, dull whitish; those on clypeus dense, slightly long 500-600 µm, dull whitish; those on vertex long 600-800 µm, dull whitish; those on genal area dense, slightly long 300-600 µm, dull whitish; facial fovea dark brownish above, pale brownish below. Hairs on mesoscutum dense, relatively long 400-600 µm, dull whitish; those on scutellum dense, long 600-700 µm, dull whitish; those on mesepisternum dense, long 600-800 µm, dull whitish; propodeal corbícula completely developed with long curled, dull whitish hairs, without internal hairs and with anterior hairs; trochanteral floccus perfect, long, curled, whitish; femoral floccus dense, long, whitish; tibial scopa well developed, simple, dull whitish. Hairs

on metasomal terga T<sub>1</sub> with long suberect whitish hairs, T<sub>2-4</sub> with very short whitish hairs; T<sub>1</sub> without hair band; T<sub>2-4</sub> with interrupted obscure whitish hair bands; caudal fimbria yellowish brown; S<sub>2-5</sub> with long, sparse, dull whitish subapical fimbriae.

**Structure.** Head length 2.4 mm, head width 2.8 mm, HL/HW = 0.86. HW: MsW: MtW: 2.8: 2.6: 3.0. Vertex rounded in frontal view, shagreening, with fine obscure PP 20 µm, IS = 0.5. OOD: POD: OCD: = 0.5: 0.3: 0.3. FL<sub>1</sub> > FL<sub>2</sub>+FL<sub>3</sub>, FL<sub>2</sub> < FL<sub>3</sub> which is longer than broad. Eyes with inner margins subparallel. Supraclypeal area convex, weakly shiny, with small PP. Facial fovea broad occupying 3/4 space between eye and lateral ocellus, a little extending to a line at lower margins of antennal fossae, FVL = 1.0 mm, FVW = 0.45 mm. Face above antennal fossae with fine longitudinal rugulae and weak interrugal PP, shagreening. Facial quadrangle as long as broad (2.0:2.0). Clypeus convex, weakly tessellate all over, punctate with sparse weak shallow PP 30-40 µm, IS = 0.5-1, with broad longitudinal median impunctate space, CPL = 1.2 mm. Process of labrum broad, trapezoidal. Lower paraocular area polished to weakly tessellate, punctate with dense, irregular PP 30-40 µm, IS = 0.5-1. Malar space linear. Genal area broader than eye, GW: EW = 0.7:0.4, polished near eye with minute PP 20 µm, IS = 1, broadly weakly tessellate posteriorly. Mesosoma: Pronotum with lateral suture and humeral angle, densely tessellate, shiny with fine, sparse weak PP 20-25 µm, with a median longitudinal line. Mesoscutum densely



**Fig. 1.** *Andrena (Andrena) katakuri* sp. nov., female. A: general habitus in dorsal view; B: the same in lateral view; C: head in frontal view; D: mesoscutum; E: propodeum; F: metasomal terga.

tessellate, punctate, with fine, dense PP 20-30  $\mu$ m, IS = 0.5-1. Scutellum densely tessellate, punctate, and partly roughened, with dense, small PP 20-30  $\mu$ m, IS = 0.5-1. Propodeal enclosure triangular, nearly granulate all over; dorsal face of propodeum shagreened with fine, obscure PP. Mesepisternum densely tessellate, with sparse obscure small PP 20  $\mu$ m. Metasoma: Metasomal terga weakly tessellate, sparsely and weakly punctate, with microscopic PP 20  $\mu$ m, IS = 1-2; posterior depressions of terga well indicated, less tessellate, more shiny; pygidial plate U shaped with raised internal triangular area. S<sub>2-5</sub> weakly tessellate and shiny with dense, minute PP 20  $\mu$ m.

**Male:** BL 7.5-7.7 mm, WL 6.2-6.5 mm (n=6).

**Color.** Flagellum dark brown beneath; mandible with apical third reddened; wing membranes subhyaline, veins and pterostigma brown; tibial spurs yellow; posterior margins of terga brownish, transparent.

**Pubescence.** Hairs on head long, dull whitish; those on clypeus and genal area 600-800 $\mu$ ; those on antennal area whitish mixed with brownish; those on vertex 600-800 $\mu$  mixed with brownish. Hairs on mesoscutum not dense, dull whitish; those on scutellum and propodeum dense, dull whitish; those on mesepisternum dull whitish. Hairs on metasomal tergum 1 moderately long, suberect, dull whitish; those on terga 2-5 very short, sparse, dull white; terga 1-5 without hair bands; sterna 2-5 with well-formed dense curled subapical fimbriae.

**Structure.** *Head:* HL/HW = 0.76. HW: MsW: MtW = 2.5: 1.8: 2.2. Vertex rounded in frontal view, densely tessellate with close PP at middle, weakly tessellate, shiny near top of eyes. OOD : POD : OCD = 0.5: 0.3: 0.2. FL1 > FL2, FL2 < FL3 which is longer than broad. Eyes with inner margins subparallelled. Supraclypeal area nearly flat and face above antennal fossae sculptured similar to

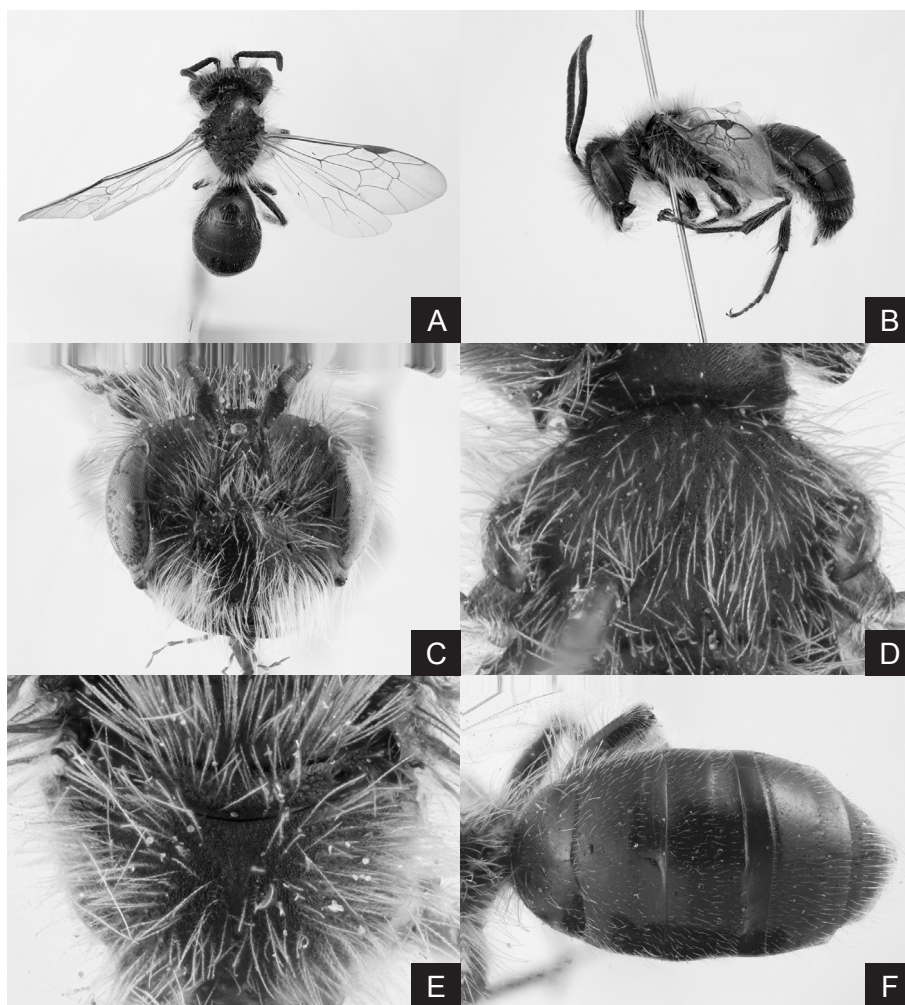


Fig. 2. *Andrena (Andrena) katakuri* sp. nov., male. A: general habitus in dorsal view; B: the same in lateral view; C: head in frontal view; D: mesoscutum; E: propodeum; F: metasomal terga.

female, but interrugal PP stronger. Facial quadrangle as long as broad (about 1.7: 1.6). Clypeus nearly flat, smooth and shiny with sparse weak PP  $\approx 20\mu$ , IS = 1-2, CPL = 0.7 mm, with broad longitudinal shiny impunctate space and median area raised. Process of labrum trapezoidal, deeply excavate beneath. Mandibles very long, decussate, falciform with a basal projection. Lower paraocular area as in clypeus. Malar space linear. Genal area broader than long, GW: EW = 0.8: 0.5, distinctly angled behind, surface finely tessellate posteriorly, narrowly smooth and shiny with minute sparse PP, IS = 1 near eye. *Mesosoma*: Pronotum with distinct humeral angle and ridge, dorsal surface weakly tessellate with obscure PP. Mesoscutum weakly tessellate with small, weak PP, IS = 0.5-1 medially, densely tessellate and denser PP peripherally. Scutellum weakly tessellate with shallow, sparse PP. Propodeum including enclosure, mesepisternum sculptured as in female.

*Metasoma*: Metasomal terga weakly tessellate and shiny with indistinct, sparse small PP, IS = 2-3; posterior depressions of terga well indicated, less tessellate, shiny. Sterna 2-5 weakly tessellate with sparse weak PP.

*Type material*: Holotype female, Yasawa, Hanamaki, Iwate Pref., Japan, 11. iv. 2003 (T. Chiba). Paratypes: same locality and collector as the holotype: 2 males, 3. iv. 2003; 2 females, 11. iv. 2003; 2 females and 4 males, 17. iv. 2003.

*Type depository*: Holotype: Entomological Laboratory, Kyushu University (ELKU), Fukuoka. Paratypes: Iwate Prefectural Museum, Morioka and ELKU.

*Remarks*: This species is similar to *Andrena hondoica* Hirashima in having the head relatively broader than long. But it is recognized by the clypeus with broad

longitudinal impunctate space, the mesoscutum more densely tessellate-punctate, the propodeal enclosure nearly granulate all over, the caudal fimbria lighter in female and the clypeus with broad longitudinal impunctate space in male.

*Etymology.* The specific name is derived from the main associated flower, *Erythronium japonicum* Decne, katakuri in Japanese.

*Floral association.* *Erythronium japonicum* Dacne, *Veronica persica* Poiret, *Salix* sp.

*Flight records:* Female. mid April, Male. early to mid April.

*Distribution:* Japan (Honshu: Iwate Pref.).

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