



A new record of *Rhododendron keiskei* Miq. var. *hypoglaucum* Suto & Suzuki (Ericaceae) in Korea

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한국 미기록 식물: 섬진달래(진달래과)

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ABSTRACT: *Rhododendron keiskei* Miq. var. *hypoglaucum* Suto & Suzuki (Ericaceae) was found in Yeosu-si, Jeollanam-do, Korea. This species is distinguished from related taxa in Korea by lepidote hairs entire, flower-bud terminal, inflorescences umbel-like racemes, corolla lepidot outside, white tinged with yellow. This taxon was named 'Seom-Jin-Dal-Lae' in Korean based on its habitat. We provide its description, illustrations, photographs and a key of related taxa in Korea.

Keywords: *Rhododendron keiskei* var. *hypoglaucum*, Ericaceae, new record, Korea

적 요: 진달래과의 *Rhododendron keiskei* Miq. var. *hypoglaucum* Suto & Suzuki가 전라남도 여주시 섬지역에서 발견되었다. 이 종은 전체적으로 인편상 털이 분포하며, 꽃의 동아는 정단부에 1개가 달리고, 화서는 산형 총상화서를 가지며, 화관은 노란색을 띠는 백색에 외부에는 인편상 털이 있는 특징을 가지고 있어 한국에 분포하는 근연 분류군들과 구분된다. 국명은 생육지를 고려하여 '섬진달래'로 신칭하였고, 이에 대한 기재, 도해, 사진 및 검색표를 제시하였다.

주요어: 섬진달래, 진달래과, 미기록, 한국

Rhododendron Linnaeus (Ericaceae Juss.) includes about 1,000 taxa and is widely distributed in Asia, Europe, North America (Fang et al., 2005). Since the genus was established by Linnaeus, its infrageneric relationships have been well studied by many taxonomists. Sleumer (1949) divided the genus into 8 subgenera and Cullen (1980) and Chamberlain (1982) divided it into 5 subgenera. Recently Fang et al. (2005) and Yamazaki (1996) divided it into 9 subgenera.

Twenty three taxa of *Rhododendron* are distributed in the wild in Korea (Korea National Arboretum et al. 2014). During an expedition to the south island in Korea, we found an

unrecorded species of *Rhododendron*. This species is characterized by evergreen and entire leaves with lepidote hairs, flower-bud terminal and single, flower white tinged with yellow. After studying the unidentified specimen and literature, we concluded it represents *Rhododendron keiskei* Miq. var. *hypoglaucum* Suto & Suzuki within section *Rhododendron* of subgenus *Rhododendron* (Yamazaki, 1996). So far it has been an endemic plant of Japan. In this study, *Rhododendron keiskei* Miq. var. *hypoglaucum* Suto & Suzuki is reported as a newly founded taxon in Korea. In addition, we provide its description, illustrations, photographs and a key of related taxa.

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Description

Rhododendron keiskei Miq. var. *hypoglaucum* Suto &

Suzuki in Trans. Nat. Hist. Soc. Formos. 22: 23 (1932)

Dwarf evergreen shrubs 30–50 cm tall (rarely 2 m). Lepidote hairs entire. Leaves elliptic to elliptic-oblong, 2–5.5 cm long, 1–2.5 cm wide, obtuse or subacute at apex, glaucous beneath. Flower-bud terminal, single (rarely 2–3), oblong-ovate. Inflorescences umbel-like racemes, with 2–6 flowers. Corolla white tinged with yellow, funnel-shaped, ca. 2.5 long, 3 cm wide, sparsely lepidote outside. Stamens 10–12, irregular, similar or slightly longer than corolla. Ovary oblong-lanceolate, densely lepidote. Style slightly curved, longer than corolla, glabrous. Capsule cylindric, straight, 10–13 mm long, 2–3 mm wide, densely lepidote. Seeds oblong, ca. 1 mm long, with a short appendage on an other side (Figs. 1, 2).

Korean name: Seom-Jin-Dal-Lae (섬진달래).

Flowering: April to May

Distribution: Japan (Honshu) and Korea (Samsan-myeon, Yeosu-si).

Voucher specimens: Korea, Jeollanam-do, Yeosu-si, Samsan-

myeon, 16 May. 2012, *S. J. Ji 12051401* (3 sheets, KH); 15 Apr. 2015, *J. C. Yang 15041501* (5 sheets, KH).

Note: *R. keiskei* var. *hypoglaucum* is very similar to *R. lapponicum* subsp. *parvifolium* (Adams) T.Yamaz. among Korean *Rhododendron*. But the former is distinguished from the latter by having leaves more than 2 cm and corolla lepidote outside, white. it was found in south island of Korea and mostly grows at rock cliffs on mountain. We could not exactly count the number of *R. keiskei* var. *hypoglaucum* due to the rugged terrain. But we guess there are hundreds of it in habitat. It was usually found on the north slope of the island and in the evergreen bushes together with *Raphiolepis indica* var. *umbellata* (Thunb.) Ohashi, *Ligustrum japonicum* Thunb., *Camellia japonica* L., *Litsea japonica* (Thunb.) Juss. etc. In Japan this species has a very limited distribution at Honshu (Kanto) (Yamazaki, 1996; Ministry of the Environment, 2012a) (Fig. 3). Ministry of the Environment (2012b) reported that *R. keiskei* var. *hypoglaucum* is assumed less than 200 individual in Japan. This species was named ‘Seom-Jin-Dal-Lae’ in Korean based on its habitat.

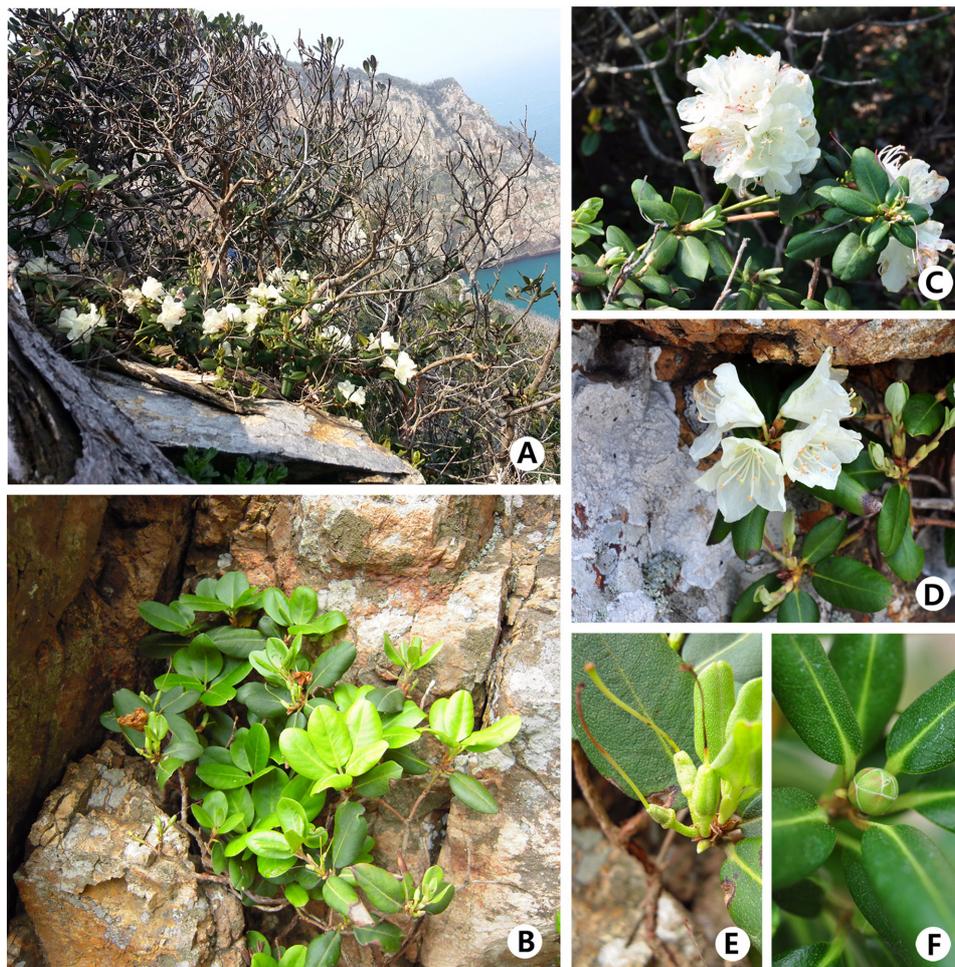


Fig. 1. Photographs of *Rhododendron keiskei* var. *hypoglaucum*. A, B. Plant habit (A: Flowering, B: Fruiting); C, D. Flowers; E. Fruits; F. Flower-bud.

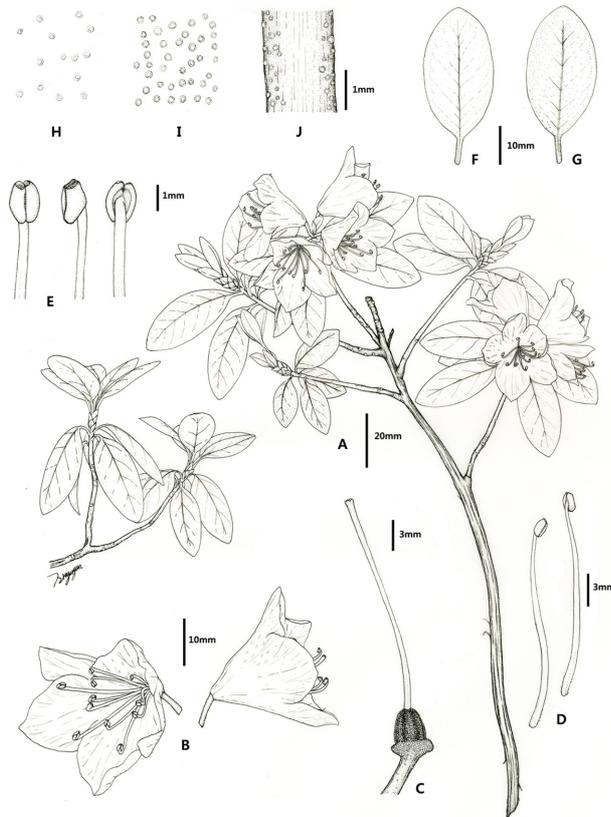


Fig. 2. Illustrations of *Rhododendron keiskei* var. *hypoglaucum*. A. Habit; B. Flower; C. Pistil; D. Stamens; E. Anther; F. Adaxial side of leaf; G. Abaxial side of leaf; H, I. Lepidote hairs of adaxial surface of leaf (H), abaxial surface of leaf (I); J. A part of petiole.

A key to *R. keiskei* var. *hypoglaucum* and its related taxa

- 1. Flower-buds clustered in axils of approximate upper leaves or scales, each bud generally producing a single flower ...
... *R. mucronulatum* (진달래), *R. dauricum* (산진달래)
- 1. Flower-buds terminal, producing an umbel-like or corymbose inflorescence
- 2. Inflorescences with 1–6 flowers in umbel-like racemes; corolla zygomorphic
- 3. Leaves more than 2 cm long (shorter in *R. keiskei* var. *ozawae*); corolla lepidote outside, white or yellow
- 4. Leaves oblong or oblong-lanceolate, apex acuminate, 3–9 cm long, pale green beneath
..... *R. keiskei* var. *keiskei*
- 4. Leaves elliptic, apex obtuse to subacute, glaucous beneath
- 5. Branches ascending, 30–50 cm tall; leaves 2–4 cm; corolla white tinged with yellow
..... *R. keiskei* var. *hypoglaucum* (섬진달래)
- 5. Branches divaricate, 10–20 cm tall; leaves 1.5–2.5 cm

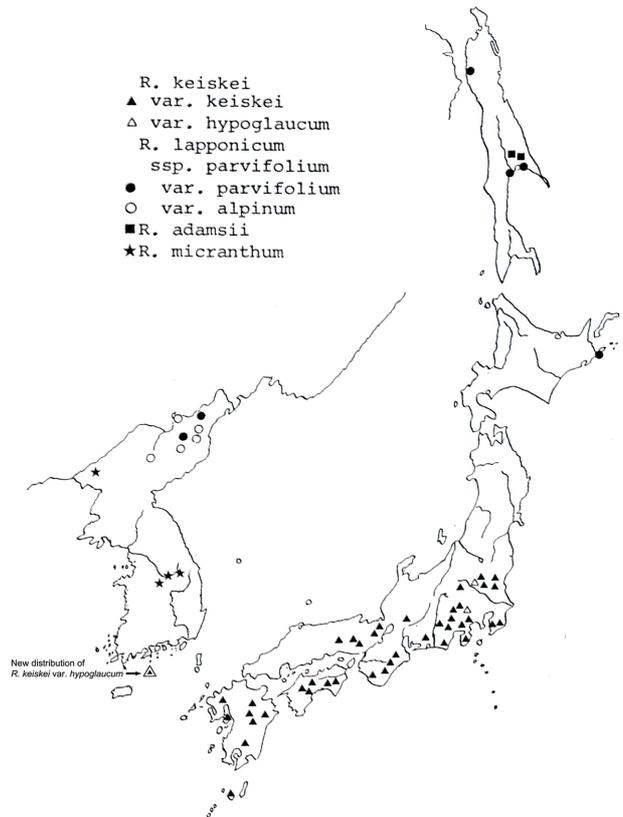


Fig. 3. Distribution of Subgen. *Rhododendron*: *R. keiskei*, *R. lapponicum*, *R. adamsii* and *R. micranthum*. (Yamazaki, 1996)

- long; corolla yellow *R. keiskei* var. *ozawae*
- 3. Leaves less than 2 cm long; corolla glabrous outside, violet ... *R. lapponicum* subsp. *parvifolium* (황산차)
- 2. Inflorescences with 10–30 flowers in corymbose racemes; corolla actinomorphic
..... *R. micranthum* (꼬리진달래)

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