

A new species of *Corydalis* sect. *Corydalis* from Korea: *C. albipetala* B. Oh

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A new species of *Corydalis* sect. *Corydalis* (Fumariaceae), *C. albipetala* B. Oh, is described from the central part of Korea. *Corydalis albipetala* is easily distinguished from its relative, *C. repens*, by its white flower and somewhat curved linear fruit. A key to these two related species of the section in Korea and northeast Asia is provided.

Keywords: Fumariaceae, *Corydalis* sect. *Corydalis*, new species, *C. albipetala*

Perennial species of *Corydalis* having solid tuber with root at base are classified into sect. *Corydalis* (Lidén, 1986). Over 30 species of this section are distributed in temperate Eurasia, especially in northeast Asia. Among these, about 10 species have already been studied by the author (Oh, 1986). In this work (Oh, 1986), three new species were added, but plants here described as *C. albipetala* B. Oh were determined as *C. repens* Mandl. et Mühl. However, further examination showed that the plant previously determined as *C. repens* is a distinct species, and it is here described as *C. albipetala*. This species is distinguished by its flower color and size, fruit shape and size, and seed arrangement as well as leaflet shape (Table 1).

Corydalis albipetala B. Oh, sp. nov. (Fig. 1)

Herba perennia nana, plantas vallem Martio ad Aprile. Rhizoma elongatum 3–7 cm longum, tuber 0.6–1.2 cm diametro carne interioris alba. Squamifolium basi caulis unum, 1.0–1.8 cm longum. Caulis ascendens e basi ramosus 10–15 cm longus, 1–2 mm diametro, transectio rotundata. Folium caul inum duo, petioli 1–4 cm longi, lamina 2.0–3.5 cm longa,

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Table 1. Comparison of *C. albipetala* and *C. repens*.

Character	<i>C. albipetala</i>	<i>C. repens</i>
Tuber diameter	0.6–1.2 cm	1.0–1.5 cm
Lobe of leaflet	elliptical or linear	oval or ovate
Bract shape	elliptical	ovate
Flower color	white	blue to bluish purple
length	1.2–1.8 cm	1.5–1.9 cm
Pedicel length	0.5–1.2 cm	1.5–2.0 cm
Capsule shape	linear	broad fusiform
length	1.0–1.2 cm	1.0–1.5 cm
width	0.2–0.3 cm	0.5–1.0 cm
Seed arrangement	one-rowed	two-rowed

2.5–4.0 cm lata, ternata vel biternata. Foliola elliptica vel linearis, margine integra vel fissura. Anthesis Aprille, racemus ad apicum caulis, flores 2–14. Bractea elliptica, 3–6 mm longa, 1–3 mm lata, marginis apex fissura. Pediceli 5–10 mm longa anthesis initio et 10–14 mm longa post anthesis. Flores albus, 12–15 mm longae, calcaria 6–8 mm longa. Capsula linearis, 10–12 mm longa, 2–3 mm lata, semen depositio unarie. Semen globosum, 1.2–1.3 mm longum, 1.2–1.3 mm latum, superficie splendida.

Type: Korea. Kangwon Prov.: Pyongchang-gun, Mt. Odae, around Wolchongsa, 37°44' N, 128°36' E, 25 April 1989, *B. Oh 89001* (holotype, CBU [Chungbuk National University Herbarium]); Isotypes, CBU).

Korean name: Hinhyonhosaek (흰현호색)

Perennial herb, growing from March to April. Rhizomes 3–7 cm long; tuber spherical, 0.6–1.2 cm in diameter, white inside. Stem originated from base of squamiform leaf, 1 to 5 in each individual, 10–15 cm tall, 1–2 mm in diameter, circular in cross-section. Squamiform leaf 1, 1.0–1.8 cm long. Cauline leaves 2, petiolated; lamina broad, 2.0–3.5 cm long, 2.5–4.0 cm wide, ternate or biternate. Leaflets broad, obovate; lobes elliptical to linear, entire or lobate at apex. Petioles 1–4 cm long. Inflorescences terminal racemes, 2–14 flowered, blooming from March to April; bracts 3–6 mm long, 1–3 mm wide, slightly lobate at apex; pedicels 0.5–1.0 cm long before blooming but 1.0–1.4 cm long after blooming. Flowers white, 1.2–1.5 cm long;

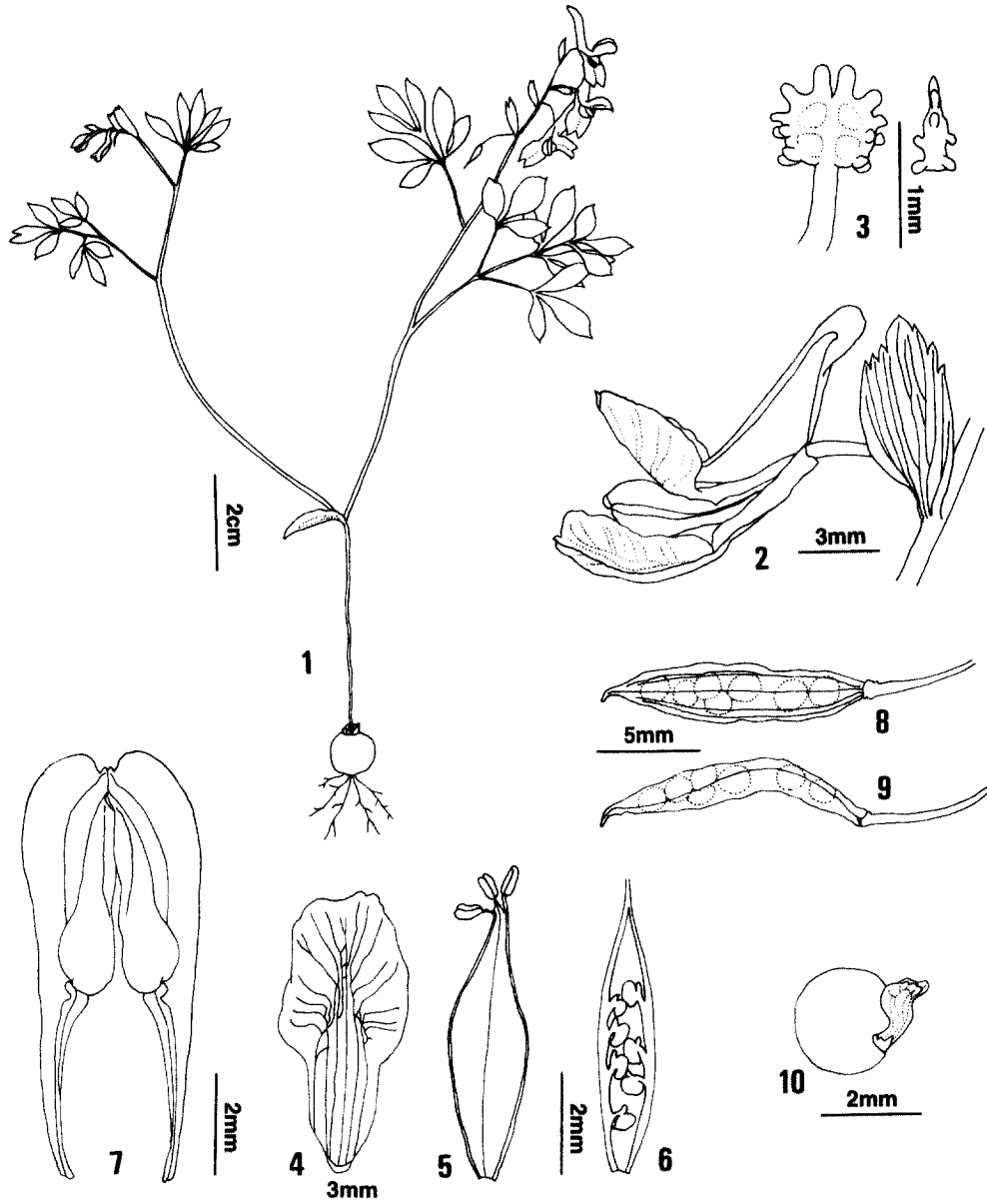


Fig. 1. *Corydalis albipetala* (B. Oh 89001). 1. Habit; 2. Flower and bract; 3. Shape of stigma (left: front view, right: lateral view); 4. Lower part of outer petal; 5. Membrane filament and anther; 6. Ovary and ovule arrangement; 7. Inner petals with broad notch at apex; 8, 9. Shape of fruit (front view) and seed arrangement (lateral view); 10. Arillate seed.

spur 6–8 mm long. Fruits capsule, linear, slightly curved, 1.0–1.2 cm long, 2–3 mm wide. Seeds flat, spherical, glossy, 1.2–1.3 mm long, 1.2–1.3 mm wide, arranged in a single row in capsule.

The distribution range of *C. albipetala* is rather limited. It is known only from the type locality and its neighboring area, Mt. Odae and Mt. Seolak in Kangwon Province. In these areas, *C. albipetala* and *C. grandicalyx* are growing together. In contrast, *C. repens* is known from the Far East including Ussouri, Manchuria, and Vladivostok (Popov, 1937; Chang, 1980). Therefore, *C. albipetala* may be an endemic species of Korea. The two species of *Corydalis* sect. *Corydalis* can be distinguished by the following key.

Key to the two species of *Corydalis* sect. *Corydalis*

1. Flowers blue to bluish purple, 1.5–1.9 cm long; pedicels 1.5–2.0 cm long; fruits broad fusiform, 1.0–1.5 cm long, 0.5–1.0 cm wide; seeds arranged in 2 rows*C. repens*
1. Flowers white, 1.2–1.8 cm long; pedicels 0.5–1.2 cm long; fruits linear, 1.0–1.2 cm long, 2–3 mm wide; seeds arranged in 1 row*C. albipetala*

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현호색속 현호색질의 1신종: 흰현호색

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적 요

한국의 중부지방에서 발견된 현호색속 현호색질(현호색과)의 1신종, 흰현호색(*C. albipetala* B. Oh)이 기재되었다. 흰현호색은 흰꽃과 다소 구부러진 열매의 특징으로 *C. repens*와 쉽게 구별된다. 한국과 동북아시아에 분포하는 것으로 알려진, 근연인 이들 두 종의 검색표를 제시하였다.

주요어: 현호색과, 현호색속 현호색질, 신종, 흰현호색

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