

First record of *Cephalanthera erecta* var. *oblanceolata* (Orchidaceae) from Korea

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은대난초속(난초과)의 미기록 식물: 민은난초

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ABSTRACT: *Cephalanthera erecta* var. *oblanceolata* N. Pearce & P. J. Cribb (Orchidaceae), previously known only from Bhutan, was first recorded in the lowland of Gyeonggi-do, Whaseong-shi, Seosin-myeon. This taxon is distinguished from *Cephalanthera erecta* by characteristics such as oblanceolate dorsal sepal and lateral petals, lanceolate lateral sepals, and simple, oblanceolate lip without spur. The vernacular name was newly given as 'Min-eun-nan-cho', based on the lip without spur. The morphological characteristics and illustrations of the taxon are provided along with its photograph.

Keywords: *Cephalanthera erecta* var. *oblanceolata*, Orchidaceae, first record

적 요: 이전에 부탄으로부터 알려진 은대난초속(난과)의 민은난초 (*Cephalanthera erecta* var. *oblanceolata* N. Pearce & P. J. Cribb)가 경기도 화성시 서신면 전곡리의 저지대에서 발견되었다. 이 식물은 등꽃받침과 결꽃잎이 도피침형이며, 결꽃받침이 피침형이고, 거가 없는 단순한 꽃잎모양의 입술꽃잎에 의하여 은난초와 구별된다. 국명은 거가 없는 입술꽃잎을 갖는데 근거하여 민은난초로 신칭하였다. 민은난초의 형태적 특징과 도해를 사진과 함께 제시하였다.

주요어: 민은난초, 난과, 미기록식물

The genus *Cephalanthera* L. C. Richard (Orchidaceae), comprised of 15 species, is widespread in Europe to eastern Asia and North America (Melchior, 1964; Sheviak and Catling, 2002). Five taxa of *Cephalanthera* have been reported from Korea: *C. erecta* Blume, *C. falcata* Blume, *C. longibracteata* Blume (Lee, 1980; Lee and Kim, 1986), *C. subaphylla* (Oh and Lee, 1988), and *C. longifolia* (Kim and Lee, 1997). *Cephalanthera subaphylla* (Miyabe and Kudo, 1932) has been treated as a variety of *C. erecta* by Ohwi in 1984.

In the present study, *Cephalanthera erecta* var. *oblanceolata* N. Pearce & P. J. Cribb has been collected from the lowland of Gyeonggi-do, Whaseong-shi Seosin-myeon, Jeongok-ri (N 37°11'28'' E 126°40'50''), and hence is reported as new to Korea. *Cephalanthera erecta* var. *oblanceolata*, having the simple,

unadorned spurless lip, was described as a peloric variety of *C. erecta* (Pearce et al., 2001). The original description was based on the specimen collected from the highlands in Punakha district of Buthan in 1967 (Pearce et al., 2001; Pearce and Cribb, 2002). This taxon is distinguished from *C. erecta* by having an oblanceolate lip without spur, and oblanceolate dorsal sepals and lateral petals. This taxon has never been reported in any other places other than Buthan, and, given its insignificant horticultural and ornamental values, we do not believe that this taxon was introduced and naturalized in Korea. It is conceivable that the occurrence of this variety has been unrecognized and thus unreported in various other places. In Korea, this taxon occurs in open forests composed of *Cephalanthera longibracteata*, *Pinus rigida*, *Quercus acutissima*, *Q. x groseserrata*, *Lindera obtusiloba*, *Parthenocissus tricuspidata*, *Poa sphondylodes*, *Calamagrostis subacrochaeta* and *Festuca ovina* etc.

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The vernacular name, "Min-eun-nan-cho", was given based on the spurless lip rather than the spurred lip of *C. erecta*, which is the most closely related species. The voucher specimens are deposited at the Ewha Womans University Herbarium (EWH, Lee N. S. et al. 0905011).

Descriptions

Cephalanthera erecta var. *oblanceolata* N. Pearce & P. J. Cribb (Orchidaceae). Edinb. J. Bot. 58(1): 110, 2001. (Figs. 1, 2)

Korean name: Min-eun-nan-cho (민은난초)

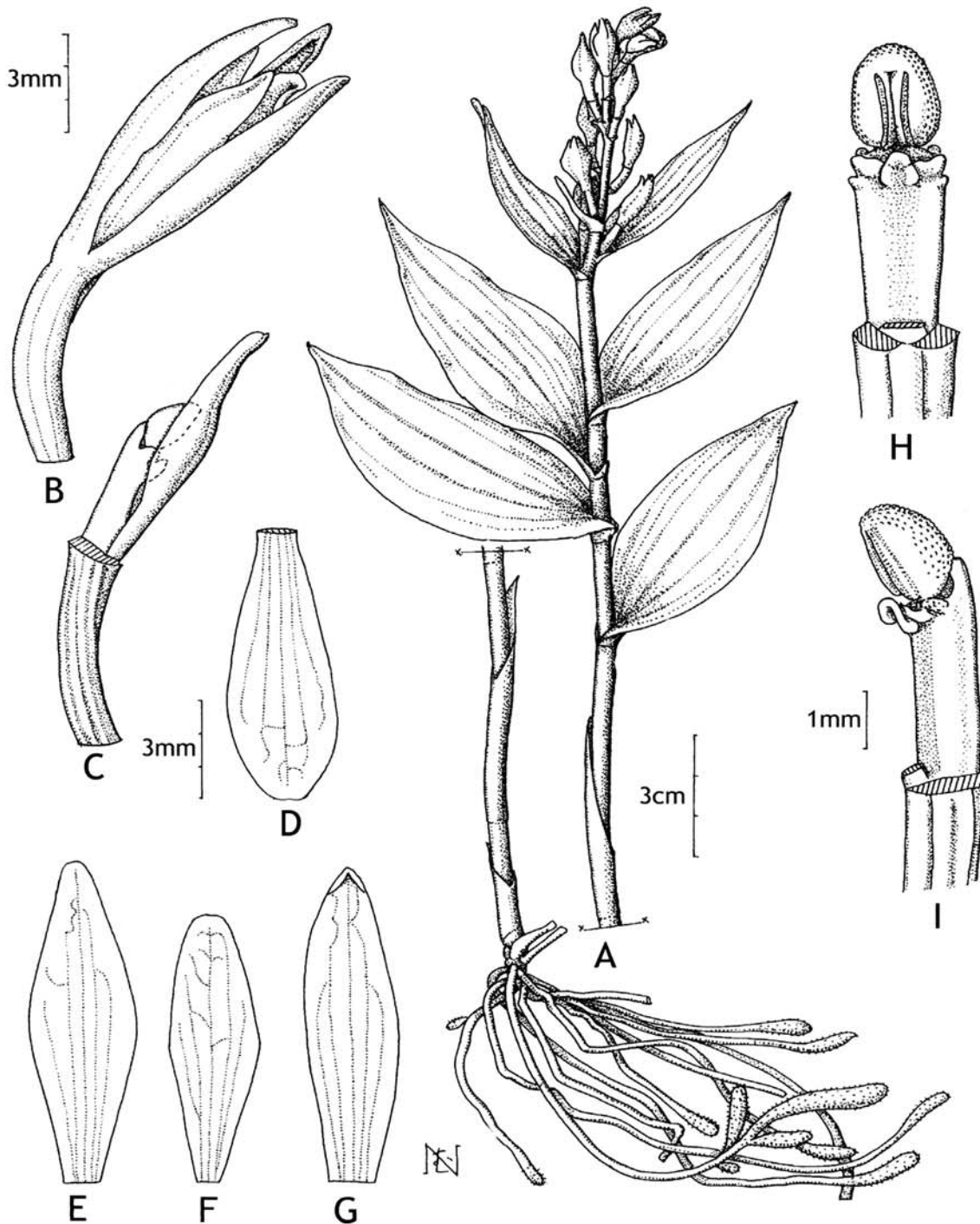


Fig. 1. *Cephalanthera erecta* var. *oblanceolata* N. Pearce & P. J. Cribb. A. Habit; B. Lateral view of flower; C. Lateral view of lip and ovary; D. Lip; E. Dorsal sepal; F. Lateral petal; G. Lateral sepal; H. Face view of column; I. Lateral view of column



Fig. 2. Photograph of *Cephalanthera erecta* var. *oblanceolata* N. Pearce & P. J. Cribb taken from Gyeonggi-do, Whaseong-shi, Seosin-myeon on May 19, 2009.

Terrestrial herbs, height 18-30 cm. **Roots** cylindrical tuberous. **Stem** erect, 1-3 mm thick, with sheaths at lower part. **Leaves** alternate, ovate to ovate-lanceolate, apex acute to subacute, sessile, prominently 3-5 nerved, 5-7 cm long, 1.5-2.0 cm wide. **Inflorescences** terminal, racemose, 6-8 flowered; rachis 4-7 cm long. **Flowers** whitish, 0.7-0.9 cm long; pedicel including ovary 5-8 mm long; bracts lanceolate, acute, 2-3 mm long, 0.5-1.0 mm wide; lowest floral bract foliaceous, lanceolate, apex acute, 1.2-1.5 cm long, 3 mm width; dorsal sepal oblanceolate, subacute, 3 nerved, 10 mm long, 2.0 mm wide; lateral sepals lanceolate, subacute, 3 nerved, 9-12 mm long, 2.0-2.3 mm wide; lateral petals oblanceolate, apex obtuse, 3 nerved, 9-10 mm long, 1.5-2.5 mm width; lip simple, peloric, oblanceolate, obtuse, 3 nerved, 9-10 mm long, 2.0-2.5 mm wide; column straight, erect, narrowly two winged at apex, 3.5 mm long; stigma broad, fleshy; pollinia 1.5 mm long, 1 mm wide. **Fruits** capsule.

Flowering: May

Distribution and Habitat: Buthan and Korea

Voucher specimens: EWH, Lee N. S. et al. 0905011

Cephalanthera erecta var. *oblanceolata* N. Pearce & P. J. Cribb can be distinguished from the other congeneric taxa in Korea as follows:

1. Leaves lanceolate or oblong lanceolate, attached to all over the stem.
2. Lip without spur, shorter than sepals
..... *C. longifolia* (김의난초)
2. Lip with spur, longer than sepals.
3. Flowers yellow, lip obtriangular; lower bracts shorter than floral axis; pedicel, ovary glabrous

- *C. falcata* (금난초)
3. Flowers white, lip ovate-oblong; lower bracts longer than floral axis; pedicel, ovary pubescent
- *C. longibracteata* (은대난초)
1. Leaves ovate lanceolate, attached to the middle-upper part of stem.
4. Leaves 1-2, the lowest leaf attached to upper part of stem; apex of sepals and lateral petals bilobed
- *C. subaphylla* (꼬마은난초)
4. Leaves more than 3, the lowest leaf attached to middle part of stem; apex of sepals and lateral petals obtuse or acute.
5. Lip with spur; dorsal sepal and lateral petals lanceolate *C. erecta* var. *erecta* (은난초)
5. Lip without spur; dorsal sepal and lateral petals oblanceolate
- *C. erecta* var. *oblanceolata* (민은난초)

Acknowledgement

This research was supported by the project of Core Environmental Technology Development Project for Next Generation (052-091-079) under the Ministry of Environment, Korea.

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