

Lycoris flavescens var. *uydoensis* M. Kim: A new variety of *Lycoris* (Amaryllidaceae) from Korea

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A new taxon of *Lycoris* is described from Isl. Uy, Chonbuk Province, Korea. *Lycoris flavescens* var. *uydoensis* M. Kim is different from var. *flavescens* in having ivory white flowers. The former is also larger than the latter especially in the perianth tube length, perianth segment width, and peduncle length. However, the new variety shares several common characters such as chromosome number ($2n=19$), smooth tepal margin, and sterile fruit with var. *flavescens*.

Keywords: *Lycoris*, *L. flavescens* var. *uydoensis*, Amaryllidaceae

Lycoris, a small genus of Amaryllidaceae having very showy flowers, is restricted to the moist warm temperate woodlands of eastern Asia including China, Korea, and Japan (Kim and Lee, 1991). The genus consists of about 17 or more taxa (Traub, 1963). Six taxa have been known to be distributed in Korea (Tae and Ko, 1995).

A new variety of *Lycoris flavescens* M. Kim & S. Lee is named and described from Isl. Uy in Korea. A new variety, *L. flavescens* var. *uydoensis* M. Kim is very different from var. *flavescens* in having ivory white flowers. The former has larger flowers than the latter specifically in perianth tube length, perianth segment width, and peduncle length.

***Lycoris flavescens* var. *uydoensis* M. Kim, var. nov. (Fig. 1)**

Bulbus ovatus, 5.5–7.5 cm longus, 4.0–5.5 cm latus; folia linearia, viridis, 47–66 cm longa, 1.7–2.5 cm lata, sero Februario mense producta; scapus sero Augusto et novo Septembury productis, 0.8–1.1 m longus; umbella florens 6–8 floribus; bracteae 2,

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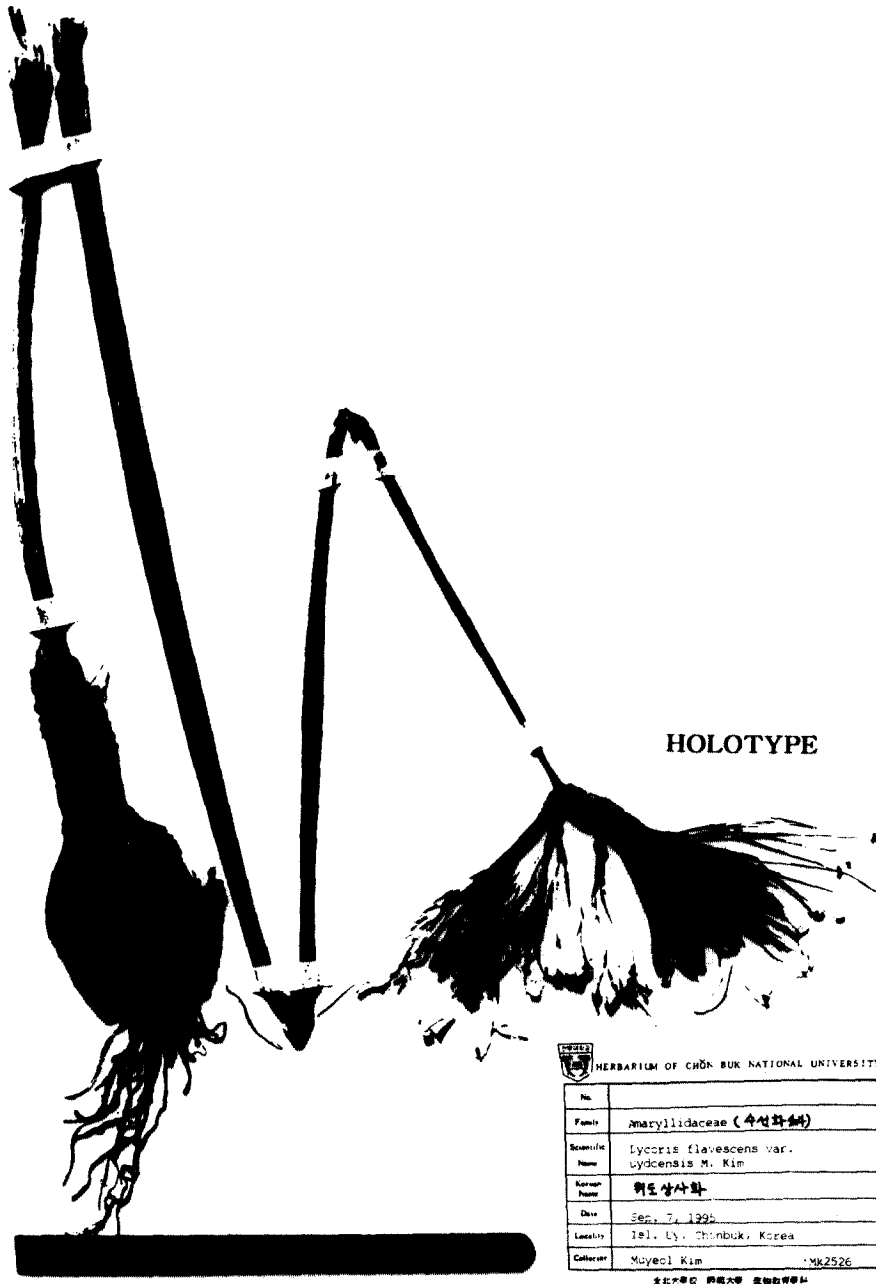


Fig. 1. Holotype of *Lycoris flavescens* var. *uydoensis* M. Kim.

Table 1. Comparison of characters in *L. flavescens* var. *flavescens*, *L. flavescens* var. *uydoensis*, and *L. albiflora*.

Character	<i>L. flavescens</i> * var. <i>flavescens</i>	<i>L. flavescens</i> var. <i>uydoensis</i>	<i>L. albiflora</i>
Perianth color	pale yellow	ivory white	white
Filament color	pale yellow	ivory white	white
Style color	pale yellow	ivory white	white
Peduncle length	0.40–0.70 m	0.80–1.10 m	0.34–0.41 m
Pedicle length	2.2–5.2 cm	0.7–2.0 cm	0.6–1.0 cm
Perianth tube length	1.4–1.8 cm	2.0–2.4 cm	0.7–1.1 cm
Perianth segment length	5.0–5.5 cm	5.5–6.2 cm	3.9–4.4 cm
Perianth segment width	1.0–1.2 cm	1.3–1.8 cm	0.7–0.8 cm
Flowering period	mid Aug.	late Aug. – early Sep.	Sep.–Nov.
Flower number	5–7	6–8	5–6
Perianth segment margin	smooth	smooth	undulate
Bulb shape	ovate	ovate	ovate
Leaf growing period	Feb.–May	Feb.–May	Feb.–May
Chromosome number	2n=19	2n=19	2n=16, 17, 18
Fruit fertility	sterile	sterile	sterile

*Kim and Lee (1991)

lanceolatae, 4–6 cm longae, 1–2 cm latae; pedicelli 0.7–2.0 cm longi; tepala eburnea, segmentis tepalorum oblanceolatis 5.5–6.2 cm longis, 1.0–1.5 cm latis; styli filiformes, 7.5–9.4 cm longi; ovarium 0.5 cm longus; numerus chromosomatum 2n=19.

Type: Korea. Chonbuk Prov.: Isl. Uy, 7 Sep. 1995, *M. Kim 2526* (holotype, JNU [Chonbuk National University Herbarium]).

Korean name: Uydosangsahwa (위도상사화)

Bulbs ovate with long neck, 5.5–7.5 cm long, 4.0–4.5 cm wide. Leaves linear, green, 47–66 cm long, 1.7–2.5 cm wide, appearing in late February. Scape erect, appearing in late August and early September, 0.8–1.1 m tall; umbel 6– to 8–flowered; bracts 2, lanceolate, 4–6 cm long, 1–2 cm wide; pedicels 0.7–2 cm long; tepal ivory white; tepal tube 2.0–2.4 cm long, 0.8–1 cm in diameter; tepal segments 5.5–6.2 cm long, 1.3–1.8 cm wide, smooth

Fig. 2. *Lycoris flavescens* var. *Uydoensis* M. Kim. Scale bar equals 1 cm. A. Photograph of flowers at the type locality; B. Young flowers in bracts; C. Bulb with leaves.

at the margin; filaments 7.0–8.3 cm long, white; anthers 0.7 cm long, reddish yellow; style 7.5–9.4 cm long, ivory white; ovary pale green, 0.5 cm long; chromosome number $2n=19$.

The new variety, *L. flavescens* var. *uydoensis*, is distinctly different from *L. flavescens* var. *flavescens* in flower color, perianth size, and peduncle length (Table 1, Fig. 2). *Lycoris flavescens* var. *flavescens* has pale yellow flowers (Kim and Lee, 1991), but the new variety has ivory white ones blooming in late August and early September. Also, the latter has flowers larger than the former. But the new variety shares some similarities with var. *flavescens* including the chromosome number ($2n=19$) and shape (3 metacentric, 4 telocentric, 1 submetacentric, and 11 acrocentric chromosomes), the smooth tepal margin, and the sterile fruit (Tae, 1995). Therefore, the author treated this new taxon as a variety of the *L. flavescens*. The new variety is distinguished from *L. chejuensis* K. Tae et S. Ko in having yellowish white flowers and the chromosome number of $2n=30$ (Tae and Ko, 1993). It is also distinguished from *L. albiflora* Koidz. in having white flowers, heavily undulate perianth margin (Koyama, 1959; Tae, 1995), and the chromosome numbers of $2n=16, 17, 18$ (Kurita, 1988).

Key to *Lycoris flavescens* var. *uydoensis* and its closely related taxa

1. Margin of perianth segments smooth; perianth tube 0.8–2.5 cm long; perianth segment 4.7–6.2 cm long; chromosome number $2n=19$.
 2. Color of perianth pale yellow; young perianth tube greenish yellow; peduncle 40–70 cm long; perianth tube 0.8–1.8 cm long; pedicel 2.2–5.2 cm long *L. flavescens* var. *flavescens*
 2. Color of perianth ivory white, young perianth tube red; peduncle 0.8–1.1 m long; perianth tube 2.0–2.5 cm long; pedicel 0.7–2.0 cm long *L. flavescens* var. *uydoensis*
1. Margin of perianth segment undulated; perianth tube 0.4–0.7 cm long; perianth segment 3.9–4.3 cm long; chromosome number $2n=16, 17, 18$ *L. albiflora*

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상사화속의 1신변종: 위도상사화

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적 요

새로이 명명된 위도상사화(*L. flavescens* var. *uydoensis* M. Kim)는 전북 부안군 위도에서 채집하였다. 본 분류군의 염색체수는 $2n=19$ 로 붉노랑상사화(*L. flavescens* M. Kim & S. Lee)와 같으나 꽃색이 상아빛 흰색으로 연노랑색의 꽃을 피우는 후자와 구별된다. 위도상사화는 붉노랑상사화보다 소화경은 짧으나 화경과 화통 길이는 길고 화피 열편은 폭이 넓고 길이가 길어 전반적으로 꽃의 크기가 큰 것이 특징이다.

주요어: 상사화속, 위도상사화, 수선화과

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