

Description of *Lycoris chinensis* Traub var. *sinuolata* K. Tae et S. Ko ex K. Tae et S. Ko (Amaryllidaceae)

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Abstract

For *Lycoris chinensis* Traub var. *sinuolata* K. Tae et S. Ko ex K. Tae et S. Ko, Korean endemic plant, latin description is add to the previous study, and a key including *L. chinensis* Traub and *L. aurea* Herb. which are closely related to the above variety, is newly provided.

Key words: *L. chinensis* var. *chinensis*, Endemic plant, *L. chinensis* var. *sinuolata*, *L. aurea*.

The genus *Lycoris* Herbert which belongs to Amaryllidaceae consists of about twenty taxa, and its distribution is limited to warm temperate of eastern Asia (Kurita, 1987). But *Lycoris* species are cultivated in America and Europe as ornamental plants, and are hybridized between species by artificial works. Also, horticulturists called them as 'Magic Lily', 'Hardy Amaryllis', 'Surprise Lily', 'Spider Lily', 'Naked Lady' and so on, because of their beautiful flowers.

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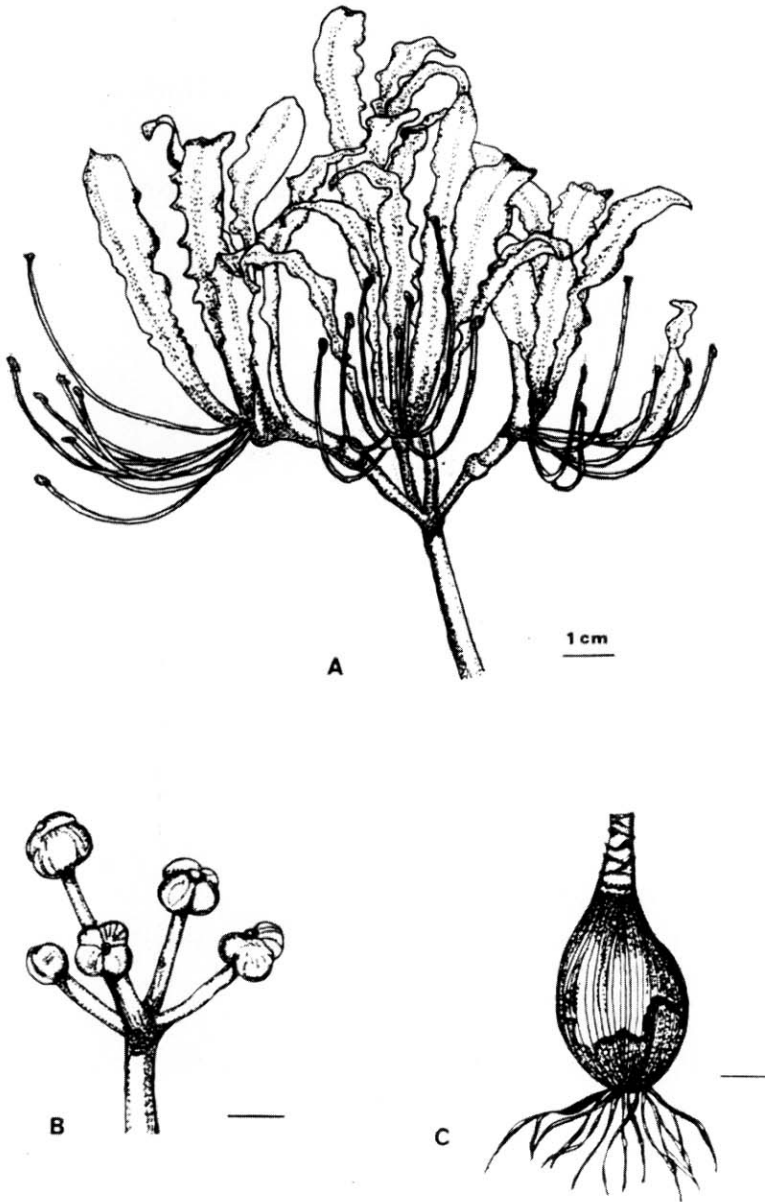


Figure 1. *Lycoris chinensis* Traub var. *sinuolata* K. Tae et S. Ko ex K. Tae et S. Ko
A; Flowers, B; Pedicel and Fruits, C; Bulb

Tae and Ko (1993) had reported *Lycoris chinensis* Traub var. *sinuolata* K. Tae et S. Ko as a new variety together with *L. chejuensis*, Korean endemic species, and it was distinctively different from *L. chinensis* Traub var. *chienesis* in bulb shape, peduncle length, bract length, tepal-tube length and distribution. It is similar to *L. aurea* Herb. in floral color and undulation of perianth, but different from in pedicel length, flowering period, leaf growing season, chromosome numbers and karyotype. The above three taxa showed very close relationship in cluster and cladistic analyses (Tae and Ko, 1995b, 1996a, 1997a).

But authors (1993) did not described in Latin for the new variety (Tae and Ko, 1993). And so, Latin description for *Lycoris chinensis* var. *sinuolata* is added to the previous study (Tae and Ko, 1993), and a new key for the above three taxa is newly provided.

***Lycoris chinensis* Traub var. *sinuolata* K. Tae et S. Ko ex K. Tae et S. Ko**, Kor. J. Plant Tax. 23: 234, 1993; Tae and Ko, Kor. J. Plant Tax. 25: 179, 1995a; Tae and Ko, Kor. J. Plant Tax. 25: 246, 1995b; Tae and Ko, Kor. J. Plant Tax. 26: 26, 1996a; Tae and Ko, J. Plant Biol. 39: 211, 1996b; Tae and Ko, Kor. J. Plant Tax. 27: 7, 1997a; Tae and Ko, Kor. J. Plant Tax. 27: 355, 1997b.

Korean name: Jin-no-rang-sang-sa-hwa (진노랑상사화)

Distribution: Korea (Jeonrabuk-do, Jeonranam-do)

Holotype: K. H. Tae. Aug. 1, 1993. Hannam University Natural History Museum (HNHM), 017452, Mt. Naejang.

Korean endemic plant

Bulbi ovatus, 3.5-5.2 cm longa. Folia linearia, viridis, 32.2-41.8 cm longa, 1.4-2.5 cm lata, sero Februario mense producta. Scapus producit in mense Augusto, 40.0-70.0 cm longus. Umbella 4-7 flores, bracteae 2, lanceolatae, 3.0-4.0 cm longa. Pedicelli 2.2-4.0 cm longi. Perigonio croceus. Tepalatubus 1.1-1.5 cm longus. Sperma 0.9-1.3 cm longa. Numerus chromosomatum $2n=16$ (Table 1, Fig. 1).

Key to the *Lycoris chinensis* var. *sinuolata* and its related taxa

1. Flowering from late July to August; leaves produced from February to May.; somatic chromosome numbers $2n=16$
2. Bulbs short neck in shape; peduncles about 21.0 cm long; bracts 2.0-2.5 cm long; tepal tubes 1.8 cm long *L. chinensis* var. *chienesis*
2. Bulbs long neck in shape; peduncles 40.0-70.0 long; bracts 3.0-4.0 cm long; tepal

Table 1. Comparison of some key characters among *L. aurea*, *L. chinensis* var. *chinensis* and *L. chinensis* var. *sinuolata*

Characters	Taxa	<i>L. aurea</i>	<i>L. chinensis</i> var. <i>chinensis</i>	<i>L. chinensis</i> var. <i>sinuolata</i>
1. Morphology				
Bulb shape		long neck	short long	short long
Peduncle length		60 cm	21 cm	40-70 cm
Bract length		3.0-5.0 cm	2.0-2.5 cm	3.0-4.0 cm
Flower color		deep yellow	deep yellow	deep yellow
Flower number		5-10	4-5	4-7
Perianth margin		undulate	undulate	undulate
Pedice! length		0.8-1.5 cm	1.1-2.4 cm	2.2-4.0 cm
Tepal-tube length		1.5-2.0 cm	1.75 cm	1.12-1.50 cm
Flowering period		Sep.-Oct.	late July-Aug.	late July-Aug.
Leaf growing duration		Oct.-May	Feb.-May	Feb.-May
2. Cytology				
Chromosome number (2n)		12, 13, 14	16	16
Karyotype		10V+2R, 9V+4R 8V+6R	6V+9R+1v 6V+8R+2v	6V+10R
3. Distribution		China, Taiwan, Japan	China	Korea

* From *L. aurea* (Ohwi, 1984; Caldwell, 1962; Bose, 1958), *L. chinensis* var. *chinensis* (Traub, 1958)

tubes 1.1-1.5 cm long *L. chinensis* var. *sinuolata*
 1. Flowering from September to October; leaves produced from October to May.; somatic chromosome numbers 2n= 12, 13, 14 *L. aurea*

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진노랑상사화 *Lycoris chinensis* Traub var. *sinuolata* K.
Tae et S. Ko ex K. Tae et S. Ko
(Amaryllidaceae)에 대한 기재

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본 연구는 신종 발표시 기록하지 않았던 진노랑상사화 *Lycoris chinensis* Traub var. *sinuolata* K. Tae et S. Ko에 대하여 라틴어 기재를 추가하였고, 또한 근연관계에 있는 *L. chinensis* Traub와 *L. aurea* Herb.를 포함한 새로운 분류군에 대한 검색표를 제시하였다.

주요어: 진노랑상사화, 특산식물, *L. chinensis* var. *chinensis*, *L. aurea*.

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