



Lilium saccatum: A new synonym of *L. souliei* (Liliaceae) for *Flora of China*

LANG-SHENG YANG¹ & GUO-QING ZHUANG^{2*}

¹ College of Landscape Architecture, Sichuan Agricultural University, Chengdu, 611130, China

² Sichuan Academy of forestry, Chengdu, 610081, China. Email: 32989640@qq.com

*Author for corresponding

Lilium saccatum S. Y. Liang (1987: 540) was published in the *Flora of Xizangica* based on the material of Qinghai-Xizang Expedition (No. 74-3754) collected on July 30th, 1974. In the protologue, the author compared this species to *L. souliei* (Franchet) Sealy (1950: 296) and indicated that the former had basally saccate tepals compared to the latter, and based on this point the new species was recognized. However, the original description and type specimens of *L. souliei* has already displayed this feature (Fig. 3J–M in Sealy 1950; our Fig. 1A), until now, this feature has not been listed in both the *Flora of Reipublicae Popularis Sinicae* (Liang 1980), and *Flora of China* (Liang & Tamura 2000).

At the beginning, *L. souliei* was raised and put into the genus *Fritillaria* as *F. souliei* Franchet (1898: 221) for having base nectar assemble to members of *Fritillaria*, in which all have basally saccate tepals. Thus based on the protologue, as well as on the type of the specimen images (Soulié1029, P-00730783!, P-00730784!, P-00730785!, Fig. 1A), *L. souliei* is absolutely a species with basally saccate tepals (Fig 1). Therefore, in *Flora of China* the description about this species (*L. souliei*) is totally inaccurate (as inferred from a comparison with the type) and the new species was unjustifiably raised. In fact, after comparing the types of both species the most important trait of flora is exactly the same, especially both of them having the feature of basally saccate tepals (Figs. 1A, B), indicating a conspecific status of these two taxa. Thus we have sufficient reason to believe that this is a misapplication of the name and thus needs to be clarified. The description of *L. souliei* needs to be re-defined in *Flora of China*, and the name *L. saccatum* must be treated as a synonym of *L. souliei* in such context.

Taxonomic considerations

Lilium souliei (Franch.) Sealy (1950: 296)

Basionmy:—*Fritillaria souliei* Franch. (1898: 221).

Type:—CHINA. Xizang: Tsékou, Sila, Dong ching tcha tsong, 28 Jun 1895, *Soulié 1029* (holotype: P-00730783!, isotypes: P-00730784!, P-00730785!).

= *Lilium saccatum* S. Y. Liang (1987: 540) *syn. nov.* **Type**:—CHINA. Xizang: Milin county, Duoxiongla Pass, shrub slope, 3900m, 30 Jul 1974, *Qinghai-Tibetan Expedition 74-3754* (Holotype: PE!; isotypes: PE!, KUN!).

Additional specimens examined:—CHINA. **Xizang**, Chayu, 01 Aug 1935, *C.W. Wang 65851* (PE). **Yunnan**, Deqin, 18 Aug 1940, *K.M. Feng 6748* (KUN); *ibidem*, 04 Aug 1940, *K.M. Feng 5915* (KUN); *ibidem*, 04 Jul 1940, *K.M. Feng 5051* (KUN); Eryuan, 25 Jul 1963, *Northwestern Yunnan Expedition 63-6106* (KUN); Fugong, 14 Jul 1978, *Bijiang Expedition 1146* (KUN); Gongshan, 04 Aug 1938, *T. T. Yu 22116* (PE); *ibidem*, 16 Oct 1938, *T. T. Yu 22805* (PE); *ibidem*, 24 Jul 1982, *Qinghai-Tibet Expedition 8465* (KUN); *ibidem*, 03 Sep 1938, *T. T. Yu 22663* (KUN); *ibidem*, 16 Oct 1938, *T. T. Yu 20715* (KUN); *ibidem*, 20 Sep 1940, *K.M. Feng 7856* (KUN); *ibidem*, 13 Jun 1938, *T. T. Yu 19056* (KUN); *ibidem*, s. d., *Q. Lin & X. F. Deng 790415* (KUN); *ibidem*, 14 Oct 1938, *T. T. Yu 20693* (KUN); *ibidem*, 16 Aug 1938, *T. T. Yu 22346* (KUN); *ibidem*, 10 Oct 1938, *T. T. Yu 22895* (KUN); *ibidem*, 09 Aug 1938, *T. T. Yu 19851* (KUN); Lijiang, 28 Jun 1939, *Y. Z. Zhao 20942* (KUN); Weixi, 10 Jul 1937, *T. T. Yu 8837* (KUN); Yangbi, 01 Jun 1932, *J. F. Rock 23167* (KUN); Shangrila, 05 Jul 1938, *T. T. Yu 11928* (KUN); 23 Jun 1939, *K.M. Feng 1376* (KUN); Jul 1937, *G. Forrest 11064* (PE).