

# Researchers complete taxonomic revision of *Cynanchum* plant species in northeastern Asia

March 7 2023, by Zhang Nannan

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*Cynanchum thesioides* growing in different habitats. Credit: WBG

*Cynanchum thesioides* (Freyn) K. Schum. is one of the most widespread species of *Cynanchum* L., a large genus in the family Apocynaceae. It is found in temperate northeastern Asia, from eastern Kazakhstan, Mongolia, northern China to the Korean Peninsula. Its morphological characteristics are highly variable, adapting to a wide range of habitats.

During taxonomic studies on *Cynanchum*, researchers from the Wuhan Botanical Garden (WBG) of the Chinese Academy of Sciences (CAS) found that the distinctions between *C. thesioides* and *C. gobicum* Grubov are questionable. The latter is endemic to Mongolia and can be distinguished from *C. thesioides* by its long and fragrant stem, broader lanceolate leaves and puberulent (as opposed to glabrous in *C. thesioides*) outer surface of the corolla.

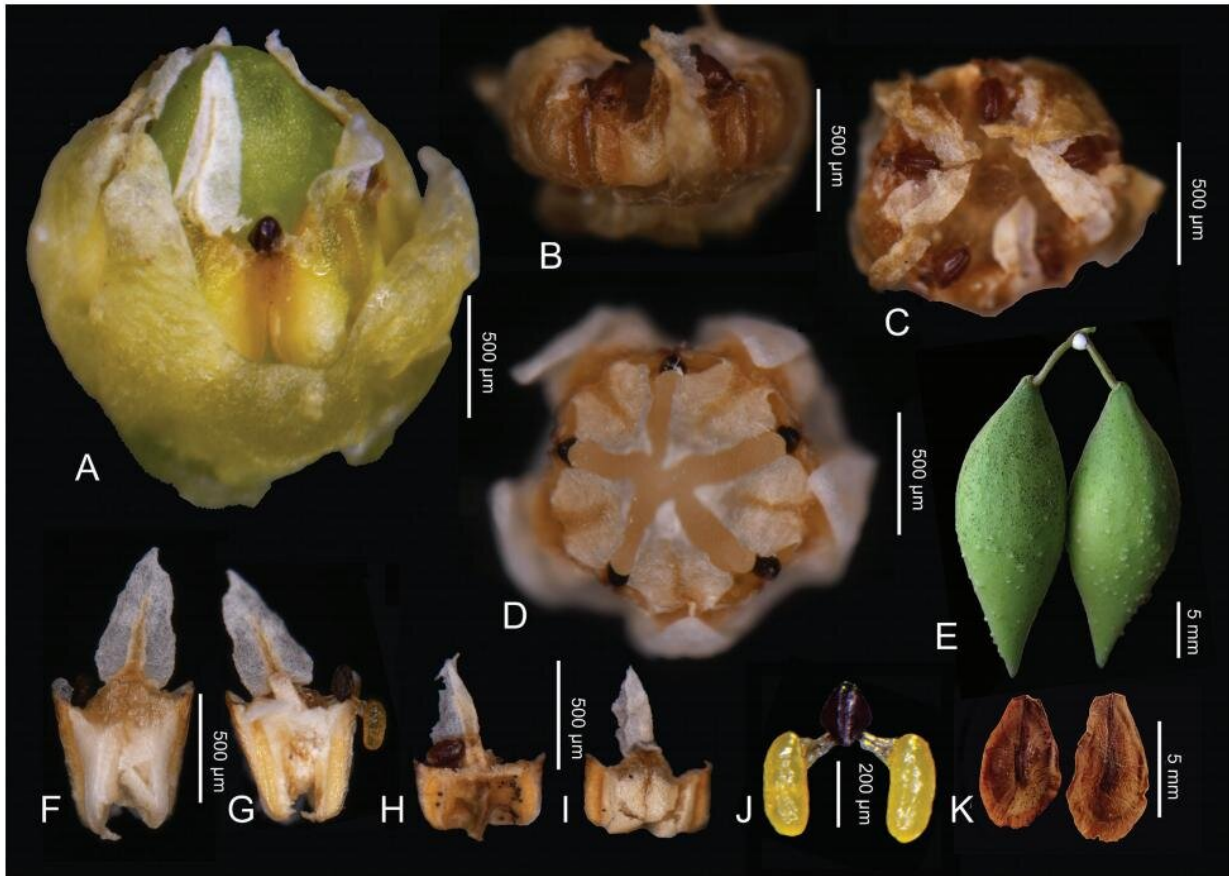
To address this issue, the researchers conducted field surveys, examined numerous plant images and specimens, and reviewed the relevant literature on the species.



External morphological characteristics of *Cynanchum thesioides*. Credit: WBG

Results showed a continuous variation in the [morphological characteristics](#) of the *C. thesioides*, including habit, [leaf shape](#), leaf size, indumenta on the inner and outer surfaces of the corolla, and the relative lengths of the stigmatic head and corona, which encompass all the characteristics of *C. gobicum*. Thus, *C. gobicum* is in synonymous with *C. thesioides*.

Meanwhile, *Vincetoxicum sibiricum* f. *linearifolium* Debeaux is also newly synonymized, a name long neglected since Debeaux described it in 1877 from specimens collected in Shandong, China in 1877.



Floral anatomy and fruit and seeds of *Cynanchum thesioides*. Credit: WBG

Finally, a thorough revision of this species is provided, including a new description, an updated distribution, and typification of all related names, including new lectotypification of *V. sibiricum* var. *australe* Maxim. and *V. sibiricum* f. *linearifolium*.

The study, titled "A taxonomic revision of *Cynanchum thesioides* (Apocynaceae) with two new synonyms," was published in *PhytoKeys*.

**More information:** Cai-Fei Zhang et al, A taxonomic revision of *Cynanchum thesioides* (Apocynaceae) with two new synonyms, *PhytoKeys* (2023). [DOI: 10.3897/phytokeys.219.93514](https://doi.org/10.3897/phytokeys.219.93514)

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