

Lonicerae Japonicae Flos

versus

Lonicerae Flos



Source

Lonicerae Japonicae Flos

is the dried flower bud or with flower just opened of *Lonicera japonica* Thunb. in the family Caprifoliaceae

Lonicerae Flos

is the dried flower bud or with flower just opened of *Lonicera macranthoides* Hand. -Mazz., *L. hypoglauca* Miq., *L. confusa* DC. or *L. fulvotomentosa* Hsu et S. C. Cheng* in the family Caprifoliaceae

Overview

Lonicerae Japonicae Flos and Lonicerae Flos are Chinese Materia Medica (CMM) listed in the Chinese Pharmacopoeia (2020). Neither of these CMM have been included in Schedule 2 of the Chinese Medicine Ordinance. Both Lonicerae Japonicae Flos and Lonicerae Flos possess similar appearance and are flower buds of *Lonicera* genus. Lonicerae Japonicae Flos was first listed in the Chinese Pharmacopoeia (1963), and at that time, only one species, *Lonicera japonica*, was included as the source of Lonicerae Japonicae Flos. In the Chinese Pharmacopoeia (1977), three species of the same genus were added as the sources of Lonicerae Japonicae Flos. According to the guidance given by the Chinese Pharmacopoeia Commission, due to variations in the historical use, chemical composition, etc. between these two CMM, particularly Lonicerae Flos containing high amount of saponins, Lonicerae Japonicae Flos and Lonicerae Flos have been listed separately since 2005. Furthermore, Lonicerae Japonicae Flos has resumed to be originated from a single source. Despite similar appearances, the compositions of Lonicerae Japonicae Flos and Lonicerae Flos differ and thus, should be used accordingly.

Note:

*Only *Lonicera macranthoides* and *L. hypoglauca* are included in this study as currently they are the main species of Lonicerae Flos in the market.

Key identification features

Macroscopic features of Lonicerae Japonicae Flos



◆ Club-shaped, slightly curved



1 cm



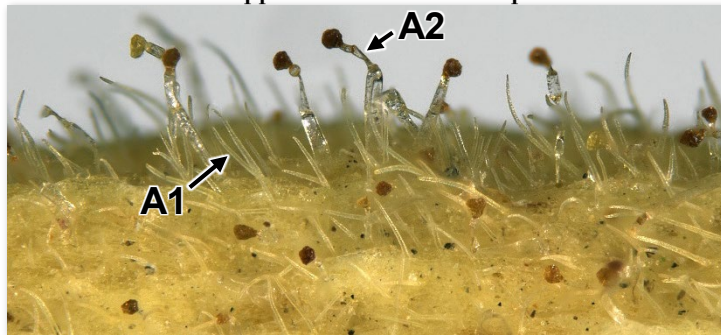
Corolla tube is densely covered with short pubescences

Calyx tube is small and 5-lobed at the apex. Lobe is ovate-triangular and has long hairs

Micro-morphological features

A1: With numerous non-glandular hairs

A2: With numerous glandular hairs. Its stalk is long, and head appears obconic or sub-spherical



(Outer surface of the corolla tube)

200 µm

Macroscopic features of Lonicerae Flos

◆ Club-shaped, slightly curved

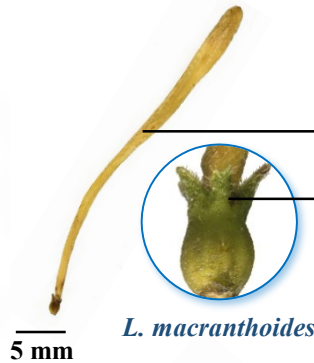
L. macranthoides



L. hypoglauca

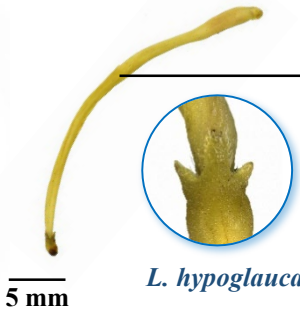


1 cm



L. macranthoides

Corolla tube is densely covered with short hairs
Calyx tube is small and 5-lobed at the apex. Lobe is triangular and has short hairs



L. hypoglauca

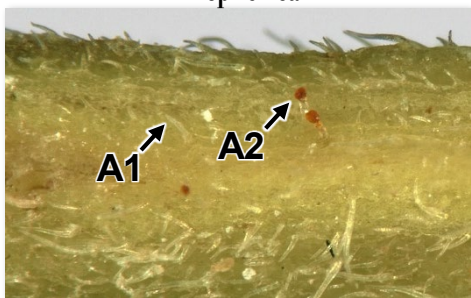
Surface of corolla tube is glabrous or sparsely covered with pubescences

Micro-morphological features

L. macranthoides

A1: Non-glandular hair is frequently observable

A2: Glandular hair is barely observable. Its stalk is short, and head appears obconic or sub-spherical



(Outer surface of the corolla tube)

200 μ m

L. hypoglauca

A1: Non-glandular hair is occasionally observable or absent

A2: Glandular hair is occasionally observable or absent. Its stalk is extremely short, and head appears sub-rounded in surface view









(Outer surface of the corolla tube)

200 μ m

Microscopic feature comparison of Lonicerae Japonicae Flos and Lonicerae Flos powder[#]



	Glandular hair	Thick-walled non-glandular hair
Lonicerae Japonicae Flos	 <p>(1) (2)</p> <p>Numerous, cells of the head arranged in several layers: one is more frequently found, relatively large and long, obconic head with flat apex in lateral view(1); another one is relatively small and short, sub-rounded, obconic or slightly flattened round head in lateral view(2)</p>	 <p>Numerous, unicellular, straight or slightly curved, relatively long, with fine warty protuberances on the surface</p>
Lonicerae Flos (<i>L. macranthoides</i>)	 <p>Occasionally found, cells of the head arranged in several layers, disk-shaped or obconic head with retuse or flat apex in lateral view</p>	 <p>Visible, unicellular, straight or slightly curved, relatively short, with fine warty protuberances on the surface</p>
Lonicerae Flos (<i>L. hypoglauca</i>)	 <p>Absent or occasionally found, large sub-rounded head in top view, seldom found in lateral view, extremely short stalk</p>	 <p>Barely found, unicellular, straight or slightly curved, relatively short, with fine warty protuberances on the surface</p>

Note:

[#]Pulverized samples which can pass through the Chinese national standard R40/3 series number 4 or number 5 sieve, or powder collected by scraping the outer surface of corolla tube gently with a blade, are used.

50 μm

Summary

Major differences in the features between Lonicerae Japonicae Flos and Lonicerae Flos :

		Lonicerae Japonicae Flos	Lonicerae Flos	
			<i>L. macranthoides</i>	<i>L. hypoglauca</i>
Macroscopic and micro-morphological features	Calyx	Lobe with long hairs	Lobe with short hairs	
	Outer surface of the corolla tube	With numerous non-glandular hairs and glandular hairs	Non-glandular hair is frequently observable glandular hair is barely observable	Non-glandular hair and glandular hair are occasionally observable or absent
Microscopic features	Glandular hair	Numerous	Occasionally found	Absent or occasionally found
	Thick-walled non-glandular hair	Numerous	Visible	Barely found

For more information, please refer to the [Hong Kong Chinese Materia Medica Standards website](#):



Lonicerae Japonicae Flos - Hong Kong Chinese Materia Medica Standards (Volume 7)

Lonicerae Flos - Hong Kong Chinese Materia Medica Standards (Volume 8)



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