Identification of Easily Confused Species of Chinese Materia Medica in Hong Kong by Macroscopic and Microscopic Characteristics Project

Caulis Trachelospermi versus Psychotriae Caulis et Folium





Source

*Caulis Trachelospermi is the dried stem with leaf of *Trachelospermum jasminoides* (Lindl.) Lem. in the family Apocynaceae

Psychotriae Caulis et Folium is the dried stem and branch with leaf of *Psychotria serpens* L. in the family Rubiaceae

Overview

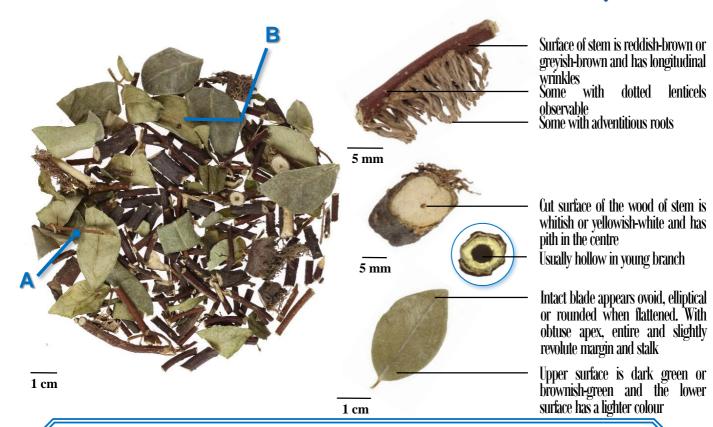
Caulis Trachelospermi has been listed in both Schedule 2 of the Chinese Medicine Ordinance and Chinese Pharmacopoeia (2020), while Psychotriae Caulis et Folium has not been listed in either references. According to the Chinese Materia Medica Standards in Guangdong Province and Guang dong zhong yao zhi, different regions have customarily used plants from different families or genera as "Luo shi teng"; while most regions of the Guangdong province use the plant Psychotria serpens. According to the Chinese Pharmacopoeia, Caulis Trachelospermi is slightly cold in property. It can dispel wind to free the collateral vessels and cool the blood and disperse swelling; while the Chinese Materia Medica Standards in Guangdong Province stated that Psychotriae Caulis et Folium is slightly warm in property. It can dispel wind and relieve pain, and relax sinews and activate collaterals. The efficacy, source and medicinal properties of both Chinese Materia Medica vary, therefore, should be used accordingly.

Note:

*Its name in the Chinese Pharmacopoeia (2020) is "Trachelospermi Caulis et Folium".

Key identification features

Macroscopic features of Caulis Trachelospermi ${igsid}$



Micro-morphological features

A: Usually with relatively long non-glandular hairs B: Usually with exposed fibres in fracture

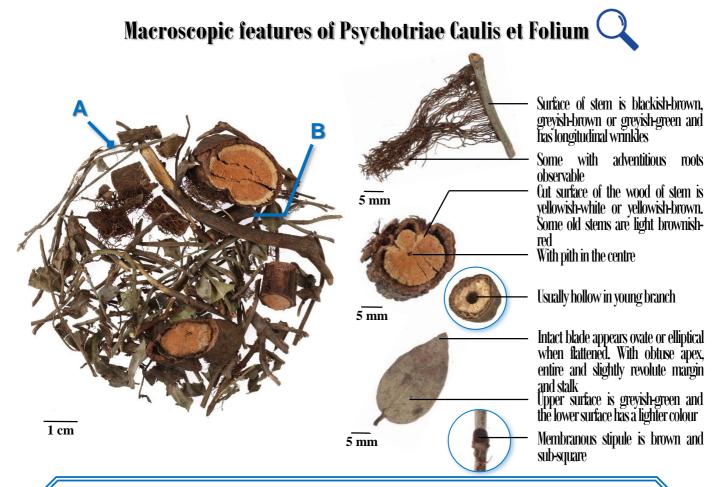


(Surface of the young branch) 500 µm



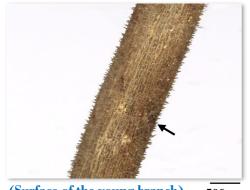
(Lateral view of the fracture of leaf)

500 µm



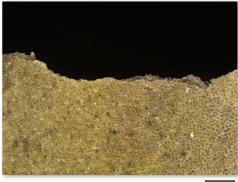
Micro-morphological features

A: Usually with relatively short non-glandular hairs



(Surface of the young branch) $5\overline{00 \ \mu m}$

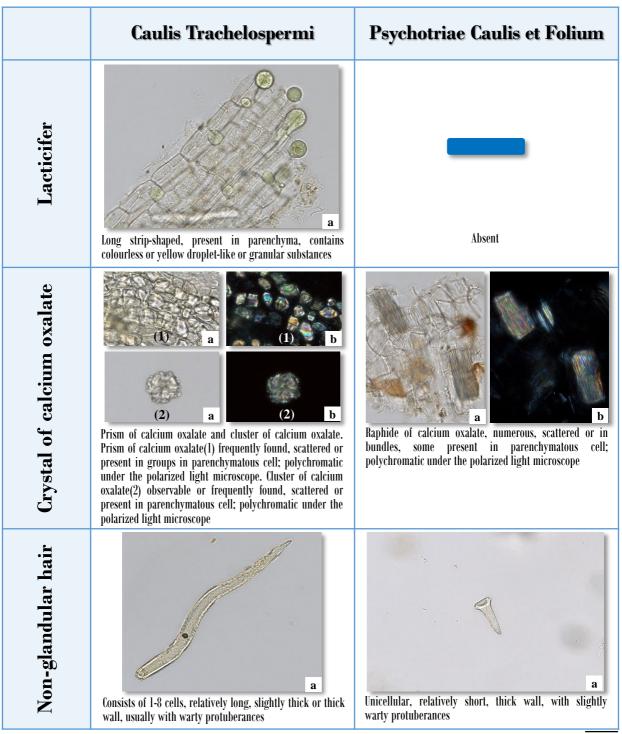
B: Without exposed fibres in fracture



(Lateral view of the fracture 50 of leaf)

500 µm

Microscopic feature comparison of Caulis Trachelospermi and Psychotriae Caulis et Folium powder



a. features under bright field; b. features under polarized light

Summary

Major differences in the features between Caulis Trachelospermi and **Psychotriae Caulis et Folium:**

		Caulis Trachelospermi	Psychotriae Caulis et Folium
Macroscopic and micro-morphological features	Surface of the stem	Some with dotted lenticels observable and some with adventitious roots	Some with adventitious roots observable
	Cut surface of the wood of the stem	Whitish or yellowish- white	Yellowish-white or yellowish-brown. Some old stems are light brownish- red
	Lateral view of the fracture of leaf	Usually with exposed fibres in fracture	Without exposed fibres in fracture
Microscopic features	Lacticifer	Present	Absent
	Crystal of calcium oxalate	With prism of calcium oxalate and cluster of calcium oxalate	Only with raphide of calcium oxalate
	Non-glandular hair	Consists of 1-8 cells, relatively long	Unicellular, relatively short

For more information, please refer to the Hong Kong Chinese Materia Medica

Standards website:



Trachelospermi Caulis et Folium - Hong Kong Chinese Materia Medica Standards (Volume 5)



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