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

Herba Lophatheri versus Folium Phyllostachydis Henonis





Source

*Herba Lophatheri

is the dried stem and leaf of Lophatherum gracile Brongn. in the family Gramineae

Folium Phyllostachydis Henonis

is the dried leaf of

Phyllostachys nigra (Lodd.ex Lindl.) Munro var. henonis (Mitf.) Stapf ex Rendleh (etc) in the family Gramineae

Overview

Herba Lophatheri is listed in Schedule 2 of the Chinese Medicine Ordinance and the Chinese Pharmacopoeia (2020); Folium Phyllostachydis Henonis on the other hand has not been listed in either references. These two Chinese Materia Medica (CMM) are often confused due to similarity between the names of the CMM and the source plant. According to the Chinese Pharmacopoeia, Herba Lophatheri can clear heat and purge fire, relieve agitation and relieve thirst, and promote diuresis to relieve strangury. On the other hand, *Zhong hua ben cao* stated that Folium Phyllostachydis Henonis has heat clearing and agitation relieving, fluid engendering and strangury relieving properties. As these two CMM differ in the source and functions, they should be used accordingly.

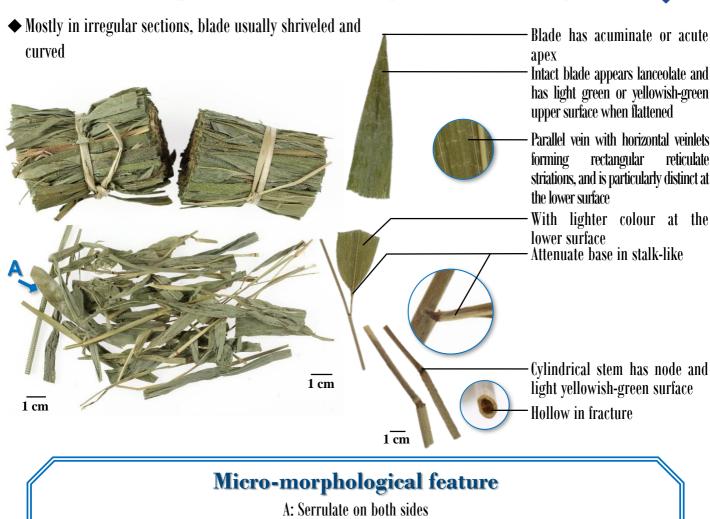
Note:

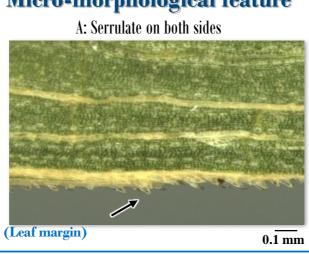
^{*}Its name in the Chinese Pharmacopoeia (2020) is "Lophatheri Herba".

Key identification features

Macroscopic features of Herba Lophatheri decoction pieces





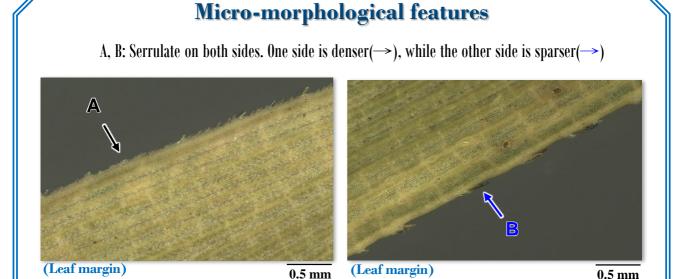


Macroscopic features of Folium Phyllostachydis Henonis



◆ Blade is mostly intact and usually shriveled and curved





Microscopic feature comparison of Herba Lophatheri decoction 🚴 pieces and Folium Phyllostachydis Henonis powder



	Herba Lophatheri decoction pieces	Folium Phyllostachydis Henonis
Upper epidermal cell of leaf	Sub-rectangular or sub-square, thin and sinuous anticlinal wall	Long cell appears long strip-shaped, sinuous anticlinal wall, with short cell (→) in between
Epidermal cell of stem	Appears long sub-rectangular, stomata (→) occasionally found	Absent

 $50 \, \mu m$

Summary

Major differences in the features between Herba Lophatheri decoction pieces and Folium Phyllostachydis Henonis:

		Herba Lophatheri decoction pieces	Folium Phyllostachydis Henonis
Macroscopic and micro-morphological features	Stem	Present	Absent
	Petiole	Absent	Present
	Leaf margin	Serrulate on both sides	Serrulate on both sides. One side is denser, while the other side is sparser
Microscopic features	Upper epidermal cell of leaf	Sub-rectangular or sub- square	Long cell appears long strip-shaped, with short cell in between
	Epidermal cell of stem	Present	Absent

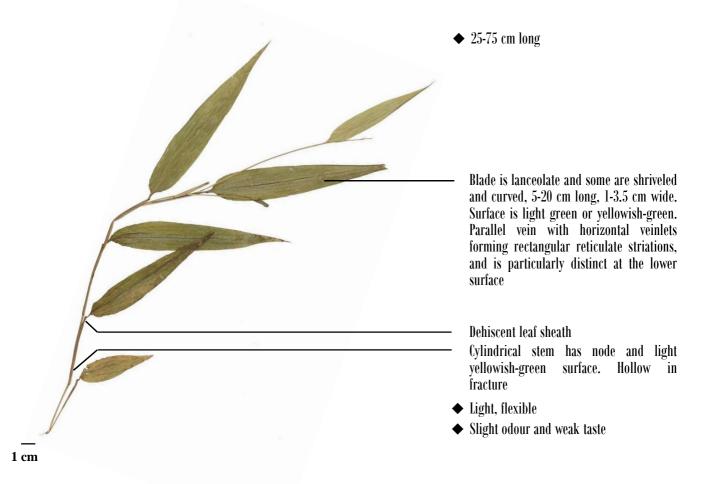
For more information, please refer to the <u>Hong Kong Chinese Materia Medica</u> Standards website:



Lophatheri Herba - Hong Kong Chinese Materia Medica Standards (Volume 5)

Additional information

Photo of crude Herba Lophatheri





Government Chinese Medicines Testing Institute Department of Health Enquiry Hotline: 3188 8079

Department of Health Website: www.cmro.gov.hk

The information in this pamphlet may be re-disseminated or reproduced, provided that the Government Chinese Medicines Testing Institute (GCMTI), as the source of information, is acknowledged and that the re-dissemination or reproduction is for non-commercial use. Any other reproduction, adaptation, distribution, dissemination or making available of the information in this pamphlet for commercial use is strictly prohibited unless prior written authorization is obtained from the GCMTI.