

# Folium Artemisiae Argyi versus Artemisiae Indicae Herba



## Source

**\*Folium Artemisiae Argyi**  
is the dried leaf of  
*Artemisia argyi* Levl. et Vant.  
in the family Compositae

**Artemisiae Indicae Herba**  
is the dried aerial part of  
*Artemisia indica* Willd.  
in the family Compositae

## Overview

Folium Artemisiae Argyi is a Chinese Materia Medica listed in Schedule 2 of the Chinese Medicine Ordinance and the Chinese Pharmacopoeia (2020). Artemisiae Indicae Herba on the other hand is not included in either references. According to the *Modern Chinese Materia Medica*, *Artemisia argyi* is the authentic species of medicinal “*Ai ye*” in tradition, and Qichun County of the Hubei province produces higher quality of “*Qi ai*”. There are more than 20 kinds of plants in the same genus that are used as “*Ai ye*” in different regions, in particular, Artemisiae Indicae Herba is used in Guangdong, Guizhou, Hebei, Shaanxi and other places. According to the Chinese Pharmacopoeia and the *Chinese Materia Medica Standards in Guangdong Province*, both Folium Artemisiae Argyi and Artemisiae Indicae Herba have the functions of meridian warming and hemostasis, dissipating cold and relieving pain, but research has shown that the content of volatile oil in Artemisiae Indicae Herba is lower than that of Folium Artemisiae Argyi, and the composition of volatile oil is different. Therefore, they should be used accordingly.

Note:

\*Its name in the Chinese Pharmacopoeia (2020) is “Artemisiae Argyi Folium”.

## Key identification features

### Macroscopic features of Folium Artemisiae Argyi



◆ Mostly shriveled and broken



1 cm



Appears 1-pinnate mostly when flattened, in which most are parted while a few is lobed

Elliptical-lanceolate lobe with irregular serrae at the margin

Greyish-green, yellowish-green or yellowish-brown upper surface



Lower surface is densely covered with greyish-white long hairs

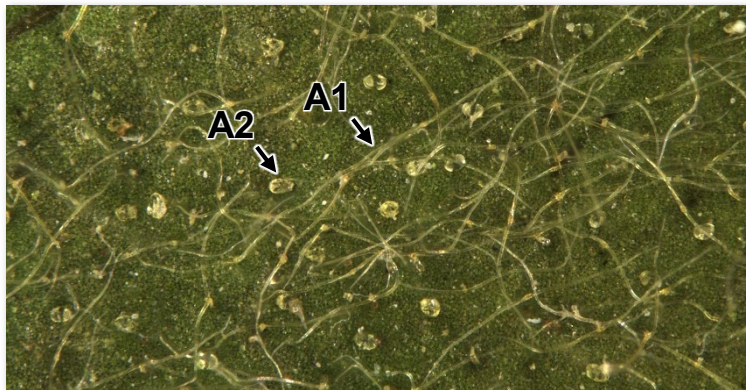
With short stalk

1 cm

### Micro-morphological features

A1: Long non-glandular hairs

A2: Glandular hairs are sub-rounded or sub-elliptical and light yellow or yellowish-white



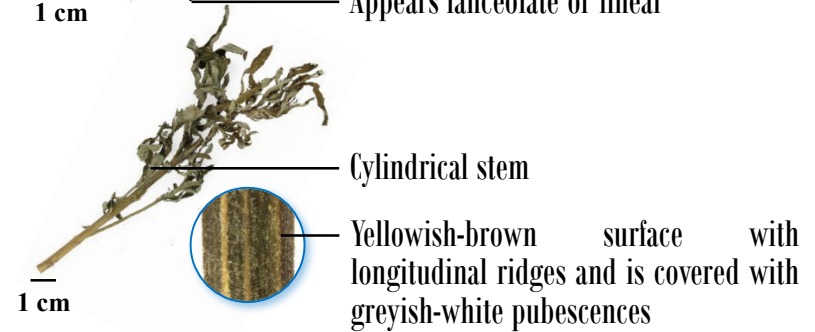
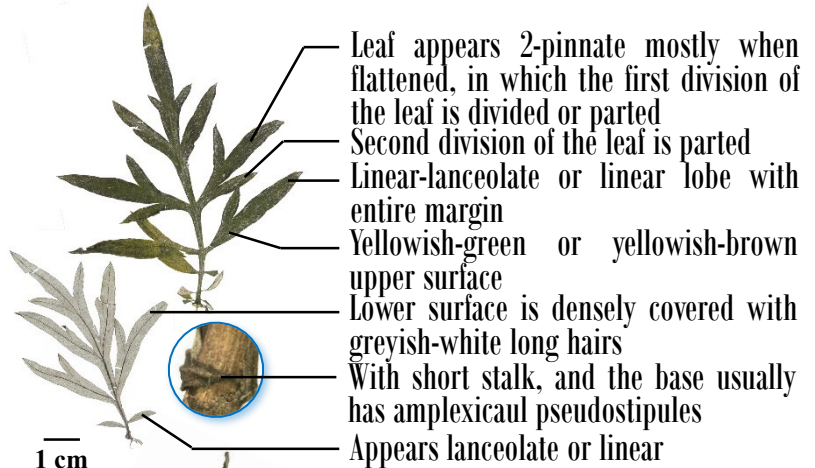
(Upper surface of the leaf)

200  $\mu$ m

## Macroscopic features of Artemisiae Indicae Herba

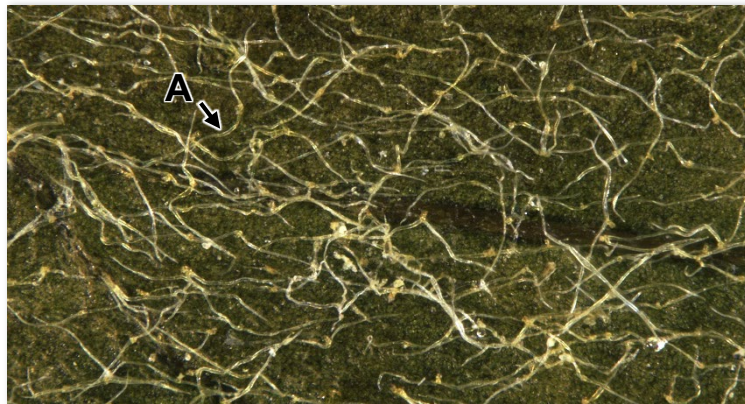


◆ Leaves are mostly shriveled and broken



### Micro-morphological feature

A: Long non-glandular hairs; without glandular hairs


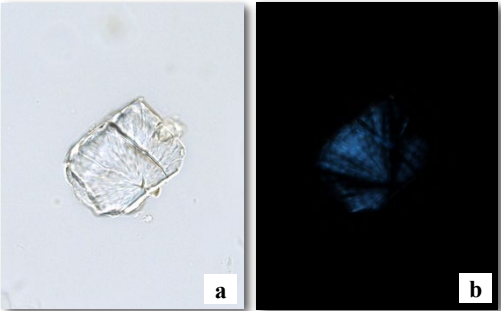


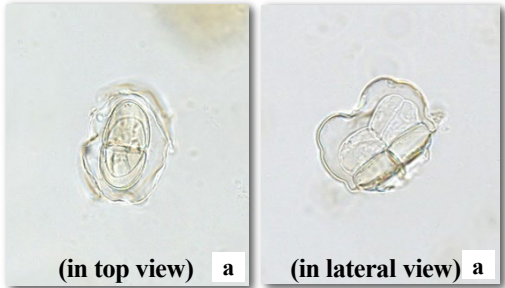
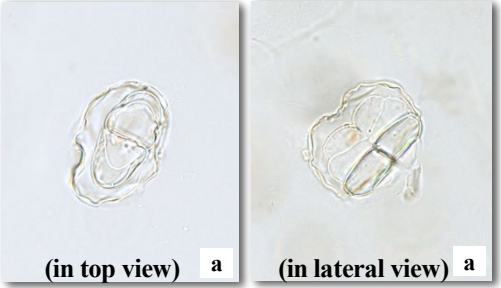


(Upper surface of the leaf)

200 μm

**Microscopic feature comparison of Folium Artemisiae Argyi and Artemisiae Indicae Herba powder**



	<b>Folium Artemisiae Argyi</b>	<b>Artemisiae Indicae Herba</b>
<b>Inulin<sup>#</sup></b>	 Absent	 <p>Irregular or slightly fan-shaped, usually with radial striations on the surface; white under the polarized light microscope</p>
<b>Epidermal cell of stem</b>	 Absent	 <p>Light yellowish-brown or yellowish-brown, cell appears polygonal in surface view</p>
<b>Glandular hair</b>	 <p>Numerous, appears sub-oblong or sub-elliptical in top view, cells seriated in pairs and surrounded by cuticle on the exterior; with 2-3 layers of cell in lateral view, without stalks</p>	 <p>Observable, appears sub-oblong or sub-elliptical in top view, cells seriated in pairs and surrounded by cuticle on the exterior; with 2-3 layers of cell in lateral view, without stalks</p>

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

50 μm

Note:

<sup>#</sup>Prepare the slide by adding chloral hydrate test solution without heating and observe.

## Summary

Major differences in the features between Folium Artemisiae Argyi and Artemisiae Indicae Herba:

		Folium Artemisiae Argyi	Artemisiae Indicae Herba
Macroscopic and micro-morphological features	<b>Stem</b>	Absent	Present
	<b>Leaf margin</b>	Mostly 1-pinnate	Mostly 2-pinnate
	<b>Upper surface of the leaf</b>	With non-glandular hairs and glandular hairs	Only non-glandular hairs
Microscopic features	<b>Inulin</b>	Absent	Present
	<b>Epidermal cell of stem</b>	Absent	Present
	<b>Glandular hair</b>	Numerous	Observable

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



Artemisiae Argyi Folium - Hong Kong Chinese Materia Medica Standards (Volume 5)



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