

# Herba Cirsii Japonici (aerial part)

versus

# Herba Cirsii



## Source

**\*Herba Cirsii Japonici<sup>^</sup>(aerial part)**  
is the dried aerial part of  
*Cirsium japonicum* DC.  
in the family Compositae

**Herba Cirsii<sup>#</sup>**  
is the dried aerial part of  
*Cirsium setosum* (Willd.) MB.  
in the family Compositae

## Overview

Herba Cirsii Japonici and Herba Cirsii are both recorded in Schedule 2 of the Chinese Medicine Ordinance and Chinese Pharmacopoeia (2020). According to the research by *Species Systematization and Quality Evaluation of Commonly Used Chinese traditional Drugs*, Herba Cirsii has been listed under Herba Cirsii Japonici in ancient Materia Medica records and was only separately listed since the *Ben cao pin hui jing yao* of the Ming Dynasty. Despite differences in the plant source of Herba Cirsii Japonici and Herba Cirsii since ancient times, when compared by ancient Materia Medica, it was mentioned that these two Chinese Materia Medica (CMM) were similar and were distinguished by their plant size. For example, it was listed in the Ming dynasty's *Ben cao pin hui jing yao* that “the stems and leaves of Herba Cirsii Japonici and Herba Cirsii are similar...compared to Herba Cirsii but larger”. According to the Chinese Pharmacopoeia, both CMM can cool the blood to stop bleeding, dissipate stasis, detoxify and disperse abscesses; however, *Zhong hua ben cao* had mentioned that the efficacy of Herba Cirsii in dispersing abscesses is weak, therefore, these two CMM should be used accordingly.

Note:

\*Its name in Chinese Pharmacopoeia (2020) is “Cirsii Japonici Herba”.

<sup>^</sup>The medicinal part recorded in Schedule 2 of the Chinese Medicine Ordinance are aerial part or root; while the medicinal part in the Chinese Pharmacopoeia only includes the aerial part. In the current study, only the aerial part is considered for direct comparison between Herba Cirsii Japonici and Herba Cirsii. To avoid confusion, the term “aerial part” is listed for distinction.

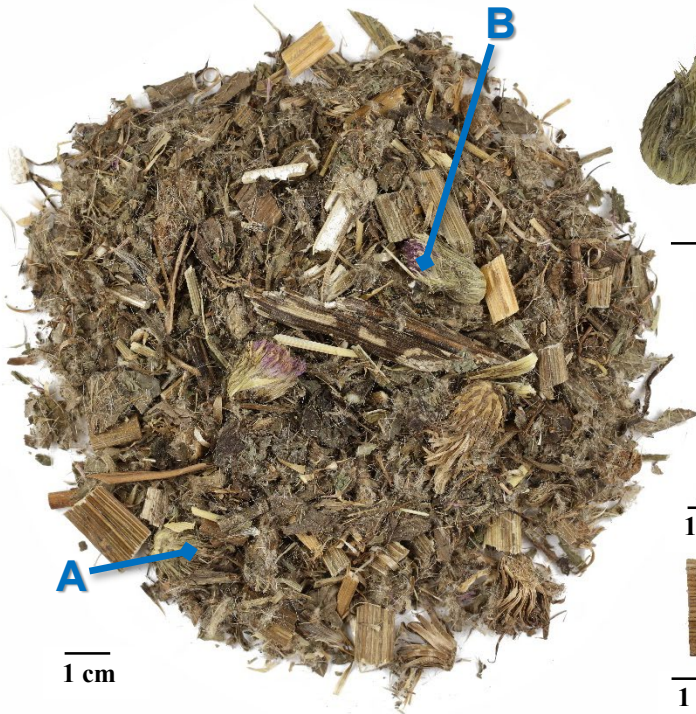
<sup>#</sup>Its name in the Chinese Pharmacopoeia (2020) is “Cirsii Herba”.

## Key identification features

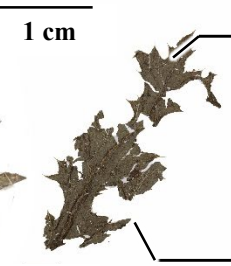
### Macroscopic features of Herba Cirsii Japonici (aerial part)



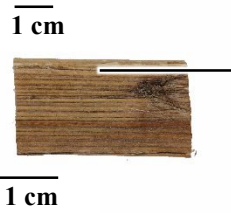
#### decoction pieces



Capitulum is mostly broken. Intact capitulum appears spherical or elliptical. Campanulate involucre has about 6 layers of lanceolate involucral bract arranged in imbricate  
Greyish-white feathery pappus has purple or purplish-red tubular flowers observable at some inflorescences



Leaf is shriveled and mostly broken. Relatively intact leaf can be observed with pinnatifid or nearly divided margin when flattened. With greyish-white pubescences on both sides



With spines of uneven length at the margin  
Cylindrical stem is relatively thick. Light green or light brownish-yellow surface has longitudinal ridges and is covered with white pubescences

### Micro-morphological features

A: Relatively narrow and long. Apex has a darker colour(→) and appears soft spine-like(→) at some of the tips



(Involucral bract)

2 mm

B: Corolla tube(1) is around the same length or slightly shorter than the lobe(2)

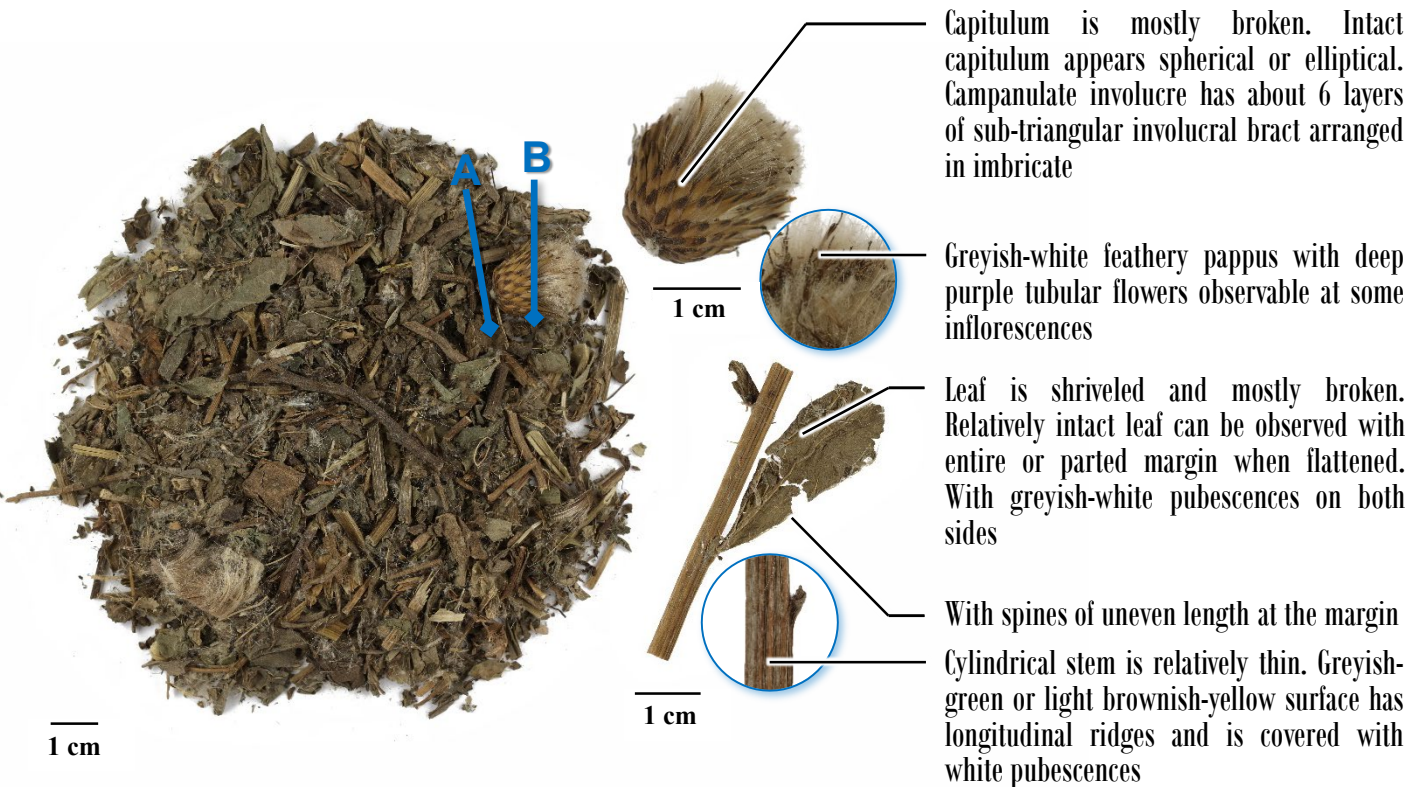


(Tubular flower)

2 mm



## Macroscopic features of Herba Cirsii decoction pieces



Capitulum is mostly broken. Intact capitulum appears spherical or elliptical. Campanulate involucre has about 6 layers of sub-triangular involucre bract arranged in imbricate

Greyish-white feathery pappus with deep purple tubular flowers observable at some inflorescences

Leaf is shriveled and mostly broken. Relatively intact leaf can be observed with entire or parted margin when flattened. With greyish-white pubescences on both sides

With spines of uneven length at the margin  
Cylindrical stem is relatively thin. Greyish-green or light brownish-yellow surface has longitudinal ridges and is covered with white pubescences

## Micro-morphological features

A: Relatively short and thick. Apex has a darker colour(→)



(Involucral bract)

2 mm

B: Corolla tube(1) is significantly longer than the lobe(2)

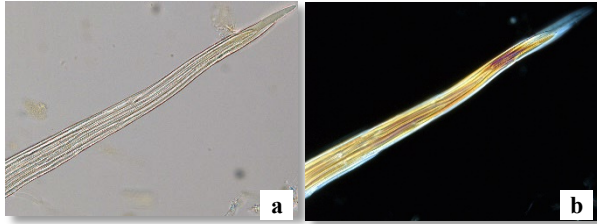
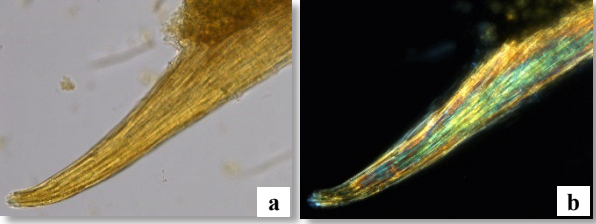


(Tubular flower)

2 mm

**Microscopic feature comparison of  
Herba Cirsii Japonici (aerial part) decoction pieces and  
Herba Cirsii decoction pieces powder<sup>§</sup>**



	<b>Herba Cirsii Japonici (aerial part) decoction pieces</b>	<b>Herba Cirsii decoction pieces</b>
<b>Fragment of the spine</b>	 <p>Observable, colourless, light yellow or yellowish-brown, relatively slender, consists of multiple columns of narrow and long sclerenchymatous cell; polychromatic under the polarized light microscope</p>	 <p>Barely found, colourless, light yellow or yellowish-brown, relatively short and thick, consists of multiple columns of narrow and long sclerenchymatous cell; polychromatic under the polarized light microscope</p>

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

50 μm

Note:

<sup>§</sup> Features of Herba Cirsii Japonici (aerial part) decoction pieces and Herba Cirsii decoction pieces powder are very similar, only small differences in the size of particular features are observable.

## Summary

Major differences in the features between Herba Cirsii Japonici (aerial part) decoction pieces and Herba Cirsii decoction pieces:

		Herba Cirsii Japonici (aerial part) decoction pieces	Herba Cirsii decoction pieces
Macroscopic and micro-morphological features	<b>Leaf margin</b>	Pinnatipartite or nearly divided	Entire or parted
	<b>Involucral bract</b>	Relatively narrow and long. Appears soft spine-like at some of the tips	Relatively short and thick
	<b>Tubular flower</b>	Corolla tube is around the same length or slightly shorter than the lobe	Corolla tube is significantly longer than the lobe
Microscopic feature	<b>Fragment of the spine</b>	Observable, relatively slender	Barely found, relatively short and thick

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

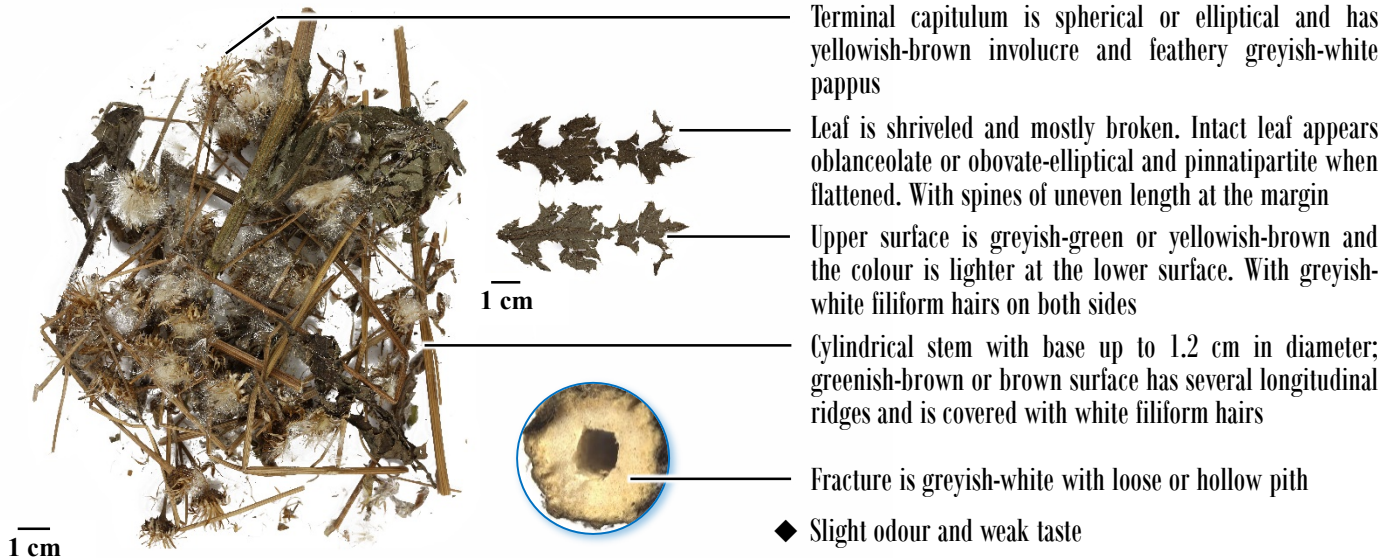


Cirsii Japonici Herba - Hong Kong Chinese Materia Medica Standards (Volume 7)

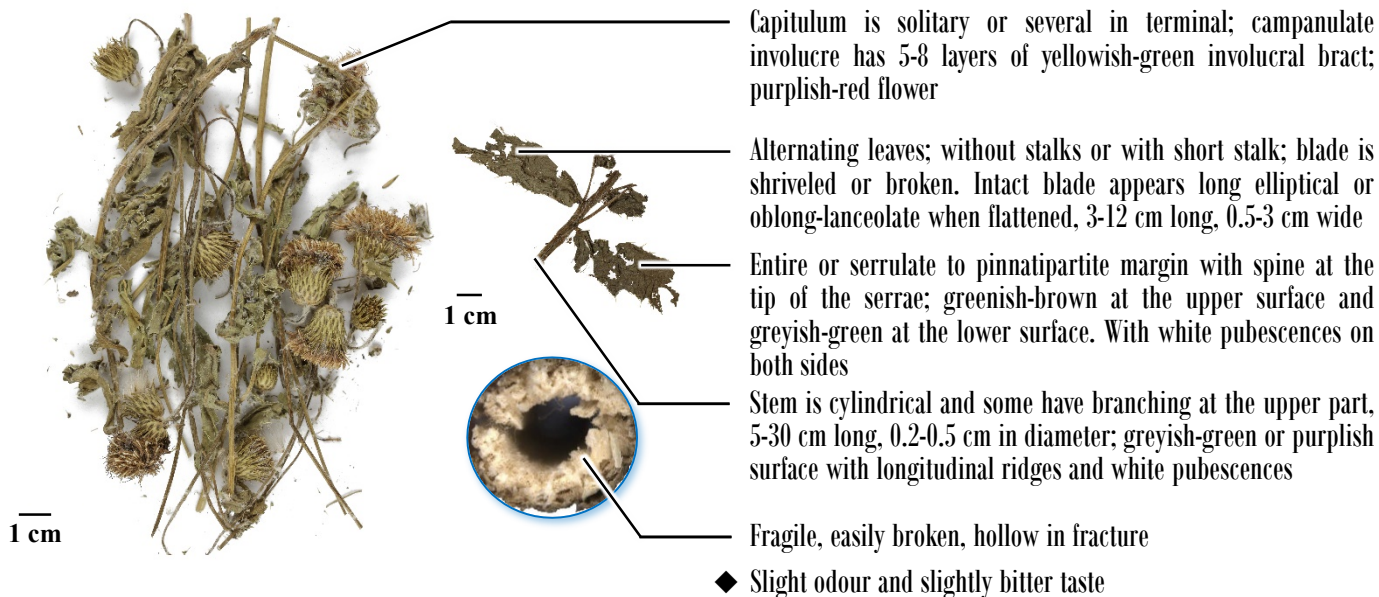
Cirsii Herba - Hong Kong Chinese Materia Medica Standards (Volume 6)

## Additional information

### Photo of crude Herba Cirsii Japonici (aerial part)



### Photo of crude Herba Cirsii



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