

# Radix Polygoni Multiflori versus Radix Polygoni Multiflori (Polygoni Multiflori Radix Praeparata)



## Source

**\*Radix Polygoni Multiflori**  
is the dried tuber of  
*Polygonum multiflorum* Thunb.  
in the family Polygonaceae

**Radix Polygoni Multiflori#  
(Polygoni Multiflori Radix Praeparata)**  
is the dried and processed tuber of  
*Polygonum multiflorum* Thunb.  
in the family Polygonaceae

## Overview

The Chinese Materia Medica (CMM) Radix Polygoni Multiflori is listed in both the Schedule 2 of the Chinese Medicine Ordinance and the Chinese Pharmacopoeia (2020). The Chinese Pharmacopoeia endorses two types of CMM, namely Radix Polygoni Multiflori and Polygoni Multiflori Radix Praeparata. The decoction pieces of Radix Polygoni Multiflori are produced from cleansing, and cutting the Radix Polygoni Multiflori into thick slices or pieces, followed by drying whilst the decoction pieces of Polygoni Multiflori Radix Praeparata are produced by stewing with black bean juice, steaming or mixed with black bean juice followed by steaming and it is listed as an individual CMM. As these two CMM are produced from the same source, the appearance of the raw and processed products are very similar. According to the Chinese Pharmacopoeia, Polygoni Multiflori Radix Praeparata can tonify the liver and kidney, replenish essence and blood, blacken the beard and hair, strengthen the sinew and bone, and resolve turbidity and reduce fat; while Radix Polygoni Multiflori can detoxify, disperse abscesses, interrupt malaria and moisten the intestines and relax the bowels. As the efficacy of these two CMM varies, they should be used accordingly.

Note:

\*Its name in Chinese Pharmacopoeia (2020 Edition) is “Polygoni Multiflori Radix”.

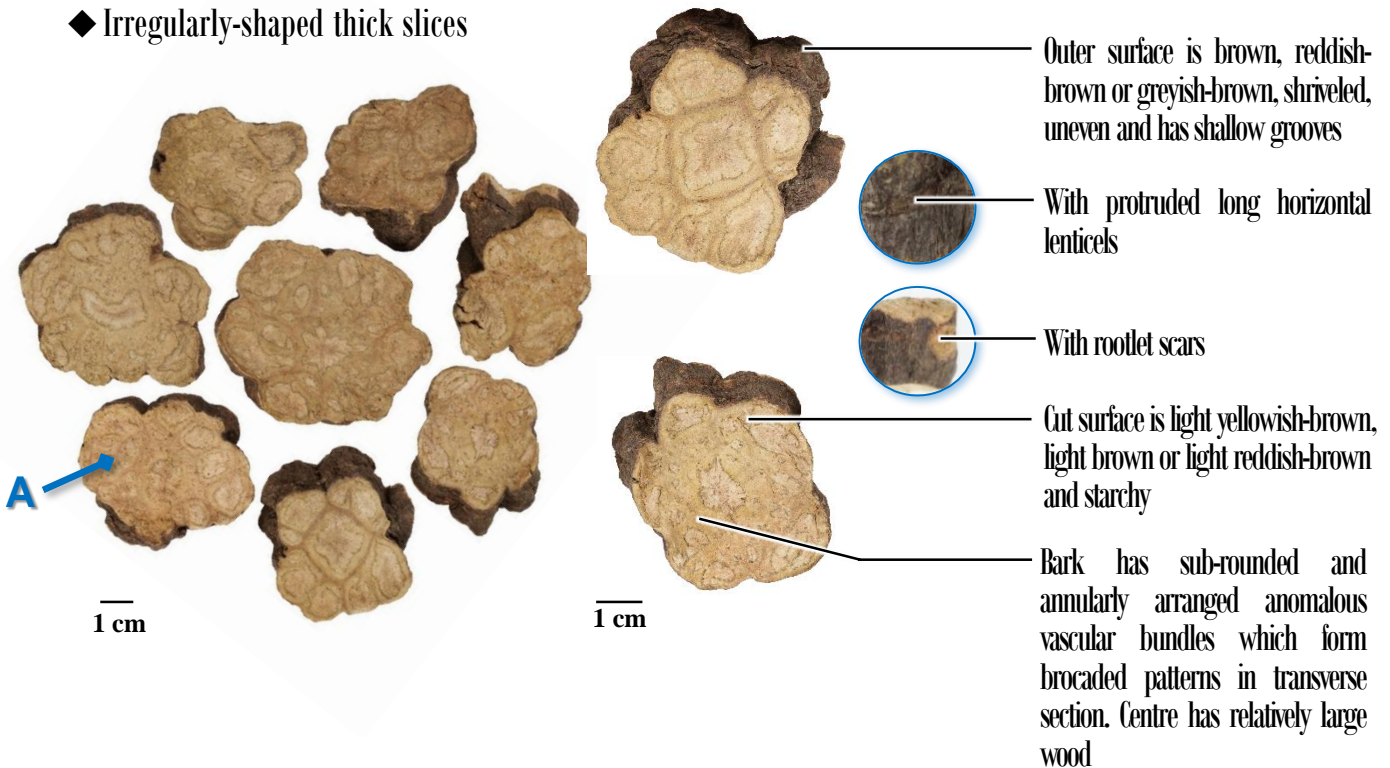
#Its name in Chinese Pharmacopoeia (2020 Edition) is “Polygoni Multiflori Radix Praeparata”.

## Key identification features

### Macroscopic features of Radix Polygoni Multiflori decoction pieces



#### ◆ Irregularly-shaped thick slices



### Micro-morphological feature

A: With observable sub-rounded, linear or dotted brown substance



(Bark)

1 mm

## Macroscopic features of Radix Polygoni Multiflori (Polygoni Multiflori Radix Praeparata) decoction pieces



### ◆ Irregularly shriveled slices



Surface is blackish-brown or brown and uneven



Cut surface is horny, brown, deep brown or blackish-brown. Some have deep brown vein striations or sub-rounded and annularly arranged anomalous vascular bundles which form brocaded patterns

### Micro-morphological feature

A: With observable lustrous black substance







(Bark)

1 mm



**Microscopic feature comparison of Radix Polygoni Multiflori and Radix Polygoni Multiflori (Polygoni Multiflori Radix Praeparata) decoction pieces powder<sup>^</sup>**

	<b>Radix Polygoni Multiflori decoction pieces</b>	<b>Radix Polygoni Multiflori (Polygoni Multiflori Radix Praeparata) decoction pieces</b>
<b>Starch granule</b>	 <p style="text-align: right;"><b>a</b></p>	 <p style="text-align: right;"><b>a</b></p>
	 <p style="text-align: right;"><b>b</b></p> <p>Numerous, gelatinization is not observed (→); black and cruciate-shaped under the polarized light microscope</p>	 <p style="text-align: right;"><b>b</b></p> <p>Barely found, mostly gelatinized (→); not black and cruciate-shaped under the polarized light microscope</p>

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

50 μm

Note:

<sup>^</sup>Features of Radix Polygoni Multiflori and Radix Polygoni Multiflori (Polygoni Multiflori Radix Praeparata) decoction pieces powders are very similar, they only differ in the amount and extent of gelatinization.

## Summary

Major differences in the features between Radix Polygoni Multiflori and Radix Polygoni Multiflori (Polygoni Multiflori Radix Praeparata) decoction pieces :

		Radix Polygoni Multiflori decoction pieces	Radix Polygoni Multiflori (Polygoni Multiflori Radix Praeparata) decoction pieces
Macroscopic and micro-morphological features	<b>Surface</b>	Brown, reddish-brown or greyish-brown	Blackish-brown or brown
	<b>Cut surface</b>	Starchy, with sub- rounded and annularly arranged anomalous vascular bundles which form brocaded patterns	Horny, shriveled or uneven. Some have deep brown vein striations or sub-rounded and annularly arranged anomalous vascular bundles which form brocaded patterns
	<b>Bark</b>	With observable sub- rounded, linear or dotted brown substance	With observable lustrous black substance
Microscopic feature	<b>Starch granule</b>	Numerous, gelatinization is not observed	Barely found, mostly gelatinized

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



Radix Polygoni Multiflori - Hong Kong Chinese Materia Medica Standards (Volume 2)

## Additional information

### Photo of crude Radix Polygoni Multiflori

