

Ziziphi Spinosae Semen

versus

Ziziphi Mauritiana Semen



Source

Ziziphi Spinosae Semen

is the dried ripe seed of

Ziziphus jujuba Mill. var. *spinosa* (Bunge)

Hu ex H. F. Chou

in the family Rhamnaceae

Ziziphi Mauritiana Semen

is the dried ripe seed of

Ziziphus mauritiana Lam.

in the family Rhamnaceae

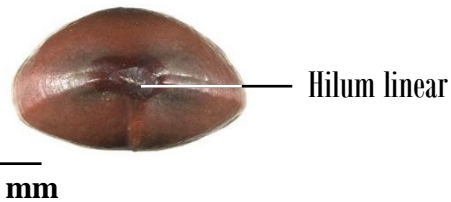
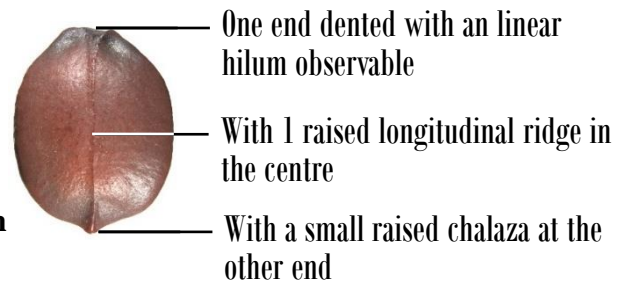
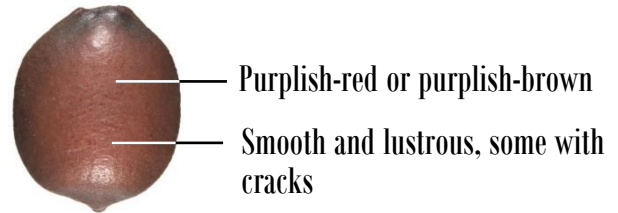
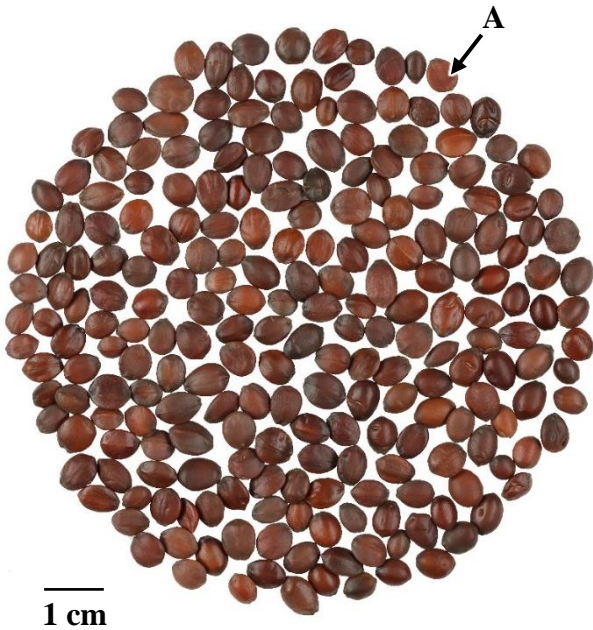
Overview

Ziziphi Spinosae Semen is listed in Chinese Pharmacopoeia (2020 Edition), while Ziziphi Mauritiana Semen is listed in the *Chinese Medicines Decoction Pieces Standards in Yunnan Province* (2005 Edition Vol 1). According to literatures, Ziziphi Mauritiana Semen is commonly used in Yunnan Province. Owing to a scarce supply of Ziziphi Spinosae Semen, it is found that Ziziphi Mauritiana Semen is sometimes used to forge as Ziziphi Spinosae Semen in other regions in China. Ziziphi Spinosae Semen can nourish the heart and tonify the liver, calm the heart to tranquilize the mind, relieve sweating, and engender fluid. While Ziziphi Mauritiana Semen can calm the heart and arrest excessive sweating. Despite sharing similar appearance, the two Chinese Materia Medica differ in functions, they should be used accordingly.

Key identification features

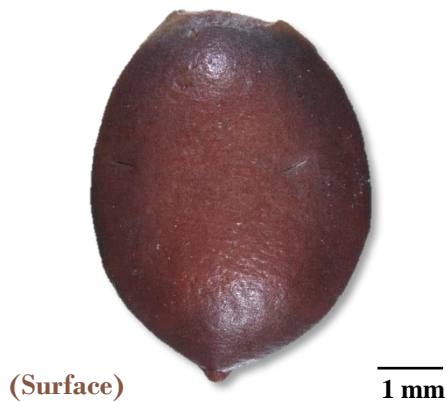
Macroscopic features of Ziziphi Spinosa Semen

- ◆ Flattened round or flattened elliptical



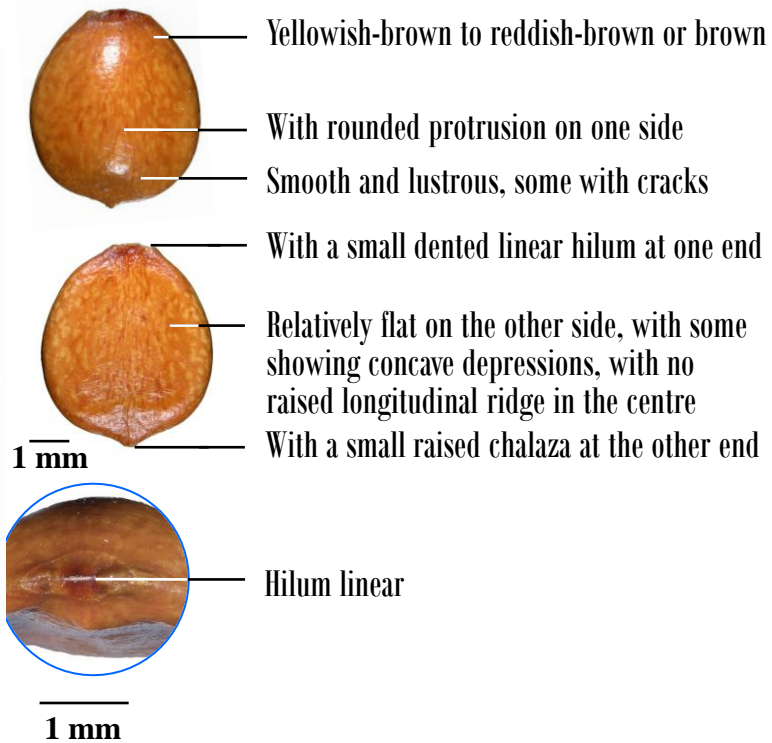
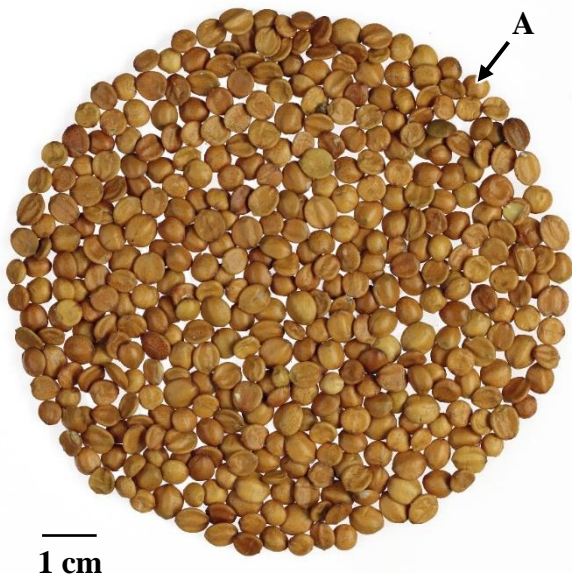
Micro-morphological feature

A: With no maculae observable



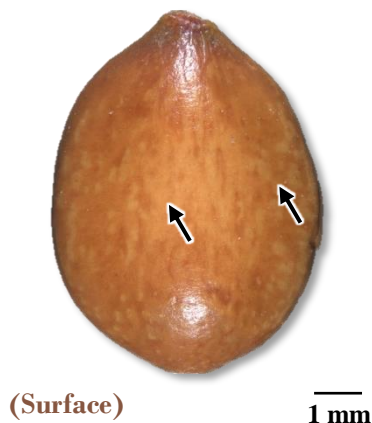
Macroscopic features of Ziziphi Mauritiana Semen

- ◆ Flattened round, peach-shaped, flattened long peach-shaped or flattened elliptical




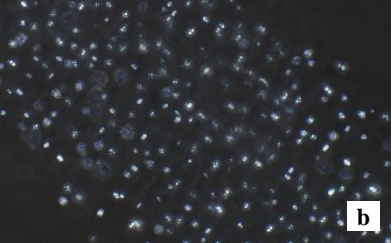


Micro-morphological features

A: With yellow, brownish-yellow, purplish-red or reddish-brown maculae (→) observable



Microscopic feature comparison of Ziziphi Spinosae Semen and Ziziphi Mauritiana Semen powder



	Ziziphi Spinosae Semen	Ziziphi Mauritiana Semen
Cotyledon cell	  <p>Fine crystals of calcium oxalate are frequently found, sub-polygonal, with dotted hollow frequently observable in the centre; bright white under the polarized light microscope</p>	  <p>Fine crystals of calcium oxalate are absent, occasionally found or barely found; bright white under the polarized light microscope</p>

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

50 µm

Summary

Major differences in the features between Ziziphi Spinosae Semen and Ziziphi Mauritiana Semen:

		Ziziphi Spinosae Semen	Ziziphi Mauritiana Semen
Macroscopic and micro-morphological features	Colour	Purplish-red or purplish-brown	Yellowish-brown to reddish-brown or brown
	Longitudinal ridge	Present	Absent
	Surface maculae	Absent	Present
Microscopic features	Cotyledon cell	Crystals of calcium oxalate are frequently found	Crystals of calcium oxalate are absent, occasionally found or barely found



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