

Macroscopic and Microscopic Identification of Cortex type of Decoction Pieces Commonly Found in Hong Kong



Cortex Albiziae*

Source The dried stem bark of *Albizia julibrissin* Durazz. in the family Leguminosae

**Property
and Flavour** Neutral; sweet

**Meridian
Affinity** Heart, liver and lung meridians

Actions To relieve stagnation and calm the mind, circulate blood and resolve swelling

**Production
Area** Mainly produced in Hubei, Jiangsu, Zhejiang, Anhui, *etc.*

Note:

* Its name in Chinese Pharmacopoeia (2020 Edition) is “Albiziae Cortex”.



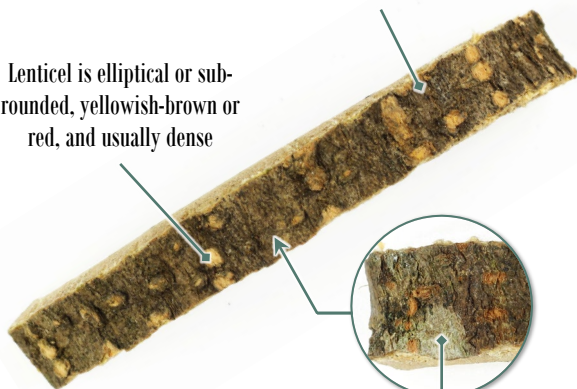


Macroscopic Identification Features

Shape Strip-shaped, curved or slightly curved

Outer surface is blackish-brown or brown, rough, and usually has wrinkles or cracks

Lenticel is elliptical or sub-rounded, yellowish-brown or red, and usually dense

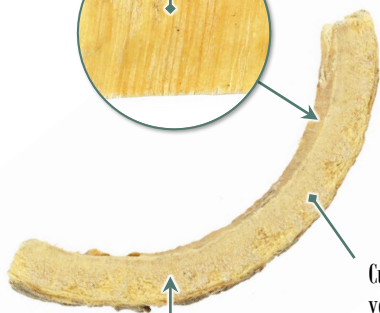
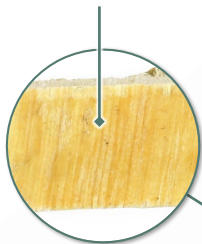


0.5 cm

Occasionally covered with patches of lichen



Inner surface is yellowish-white or light yellowish-brown, and has fine straight striations



Cut surface is yellowish-white

0.5 cm



Some cut surface is split in a laminated way



Texture Hard and fragile, easily broken

Fracture Fracture appears slightly laminated



0.2 cm

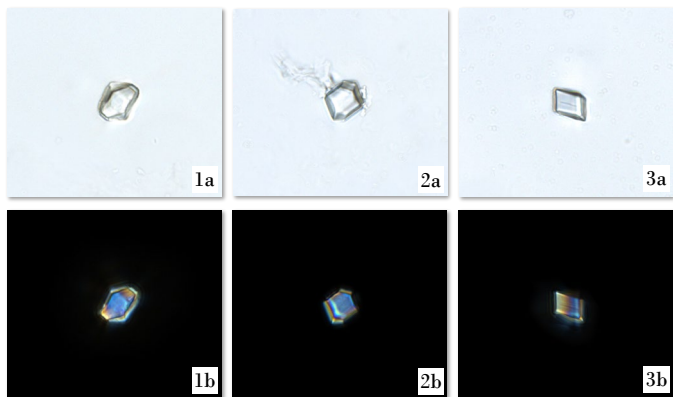
Odour Slight aroma



Features of Easy Powder Microscopic Identification

- Crystal -

Prism of calcium oxalate



50 μ m

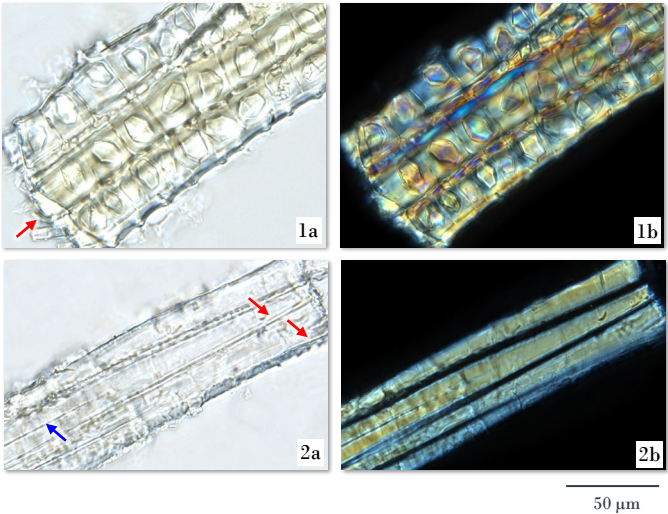
Scattered or present in crystal cell, appears double-conical (1), polygonal (2) or rhombic (3); polychromatic under polarized light microscope

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



- Sclerenchyma -

Crystal fibre

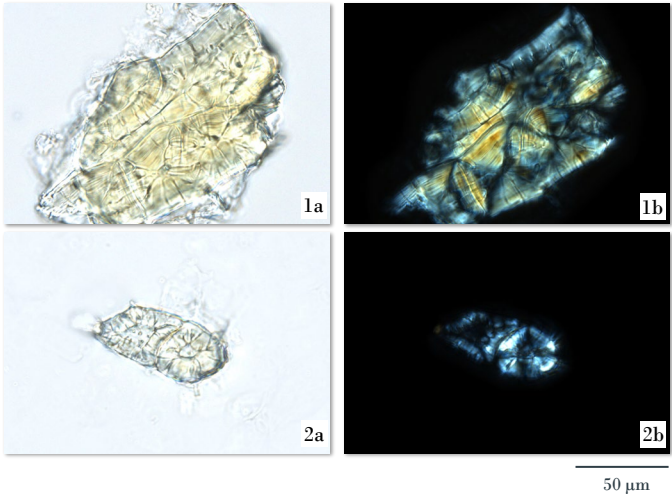


Fibre bundle is usually surrounded by crystal cells to form crystal fibre (1), fibre (2) has extremely thick wall, narrow lumen (→), some primary walls separated from the secondary walls (→); polychromatic under polarized light microscope

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



Stone cell



Light yellow or colourless, mostly in groups, appears sub-square, sub-polygonal, sub-rounded or irregular, wall is extremely thick (1) or thick (2), with distinct pit canals, some with pits; orange-yellow, polychromatic or bright white under polarized light microscope

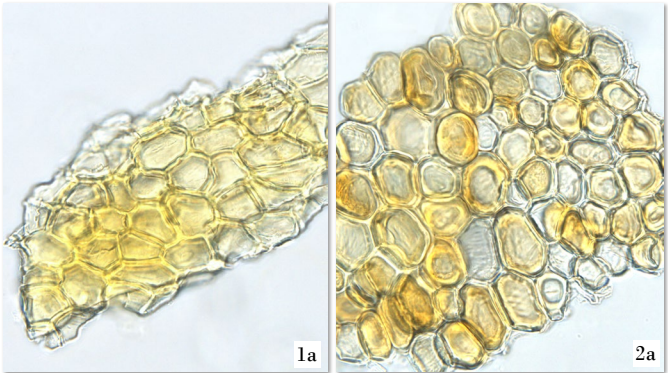
a. features under bright field; b. features under polarized light



Additional Features of Powder Microscopic Identification

- Protective tissue -

Cork cell



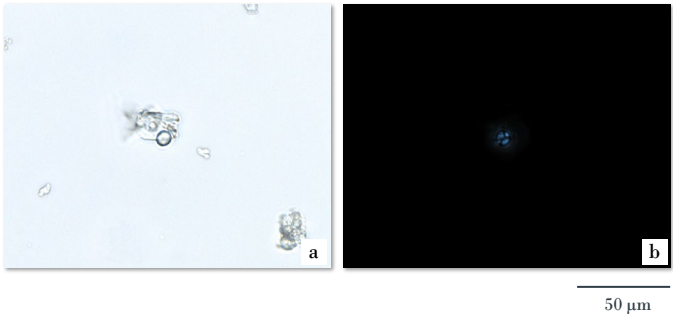
Light yellowish-brown or yellowish-brown, appears sub-polygonal (1) in surface view, some contain brown substances (2)

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



- Starch -

Starch granule



Barely found, small, mainly is simple granule, appears sub-rounded; black and cruciate-shaped under polarized light microscope

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





Key Identification Features

- Macroscopic features -

- ◇ Outer surface is rough, and has elliptical or sub-rounded lenticels that are usually dense
- ◇ Fracture appears slightly laminated

- Powder Microscopic features -

- ◇ Prism of calcium oxalate appears double-conical, polygonal or rhombic
- ◇ Fibre bundle is usually surrounded by crystal cells to form crystal fibre
- ◇ Stone cell is sub-square, sub-polygonal, sub-rounded or irregular, and has distinct pit canals

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

Albiziae Cortex — HKCMMS (Vol 6)

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