

Identification of Tiny Seed and Fruit Types of Chinese Materia Medica

Raphani Semen

The dried ripe seed of Raphanus sativus L. in the family Cruciferae

cm

Property and flavour

Source

Neutral; pungent and sweet

Meridian affinity

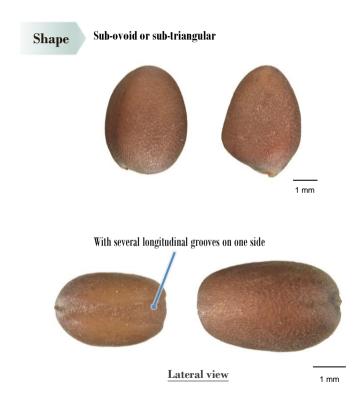
Lung, spleen and stomach meridians

Actions

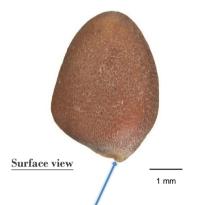
To promote digestion and relieve distention; to make qi descend and transform phlegm



Micro-morphological features



Raphani Semen



With slightly protruding round hilum at the base, appears yellowish-white, light yellow or deep brown



The side with longitudinal grooves is usually thicker

Bottom view

1 mm

Raphani Semen

Surface

Reddish-brown or yellowish-brown, with reticulate striations; with light brown and relatively dense striations (\rightarrow), and areas with darker colour (\rightarrow) around the hilum



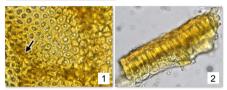
0.5 mm

0.5 mm

Powder microscopic features

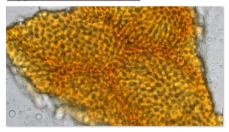
Testa

Palisade cell of testa



Present in groups, light yellow or yellowish-brown, appears subpolygonal in surface view (1), usually adheres to hypodermal cell of testa which appears as subpolygonal or flattened oblong shadow (\rightarrow); lateral side (2) is occasionally found, with slightly thick outer wall

Hypodermal cell of testa



Light yellow, appears sub-polygonal or flattened oblong in surface view, relatively large, intact ones are barely found; usually adheres to palisade cell of testa

Key identification features

Micro-morphology

- ⊙ Sub-ovoid or sub-triangular
- With several longitudinal grooves on one side, and slightly protruding hilum at the base
- Surface is reddish-brown or yellowish-brown, with reticulate striations; with light brown and relatively dense striations around the hilum

Powder microscopy

- Palisade cell of testa: present in groups, appears sub-polygonal in surface view, usually adheres to hypodermal cell of testa; lateral side is occasionally found, with slightly thick outer wall
- ⊙ Hypodermal cell of testa: appears sub-polygonal or flattened oblong in surface view, relatively large

Government Chinese Medicines Testing Institute Department of Health Enquiry hotline: 3188 8079 Website: <u>www.cmro.gov.hk</u>

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