

***Schisandra chinensis* (Turcz.) Baill.****Schisandra Fruit (Northern****Schisandra Fruit)***Schisandrae chinensis Fructus*

Pinyin: Wu wei zi, bei wu wei zi

*Schisandraceae*

Schisandra is one of the primary astringent tonifiers and adaptogenic substances used in traditional Chinese medicine. It has also become popular in the West and is included in numerous tonic herbal supplements. There are at least 38 different species of *Schisandra* and some may be traded interchangeably, though all are not medicinally equivalent. One species, *S. sphenanthera* (nan wu wei zi), is more commonly found than the northern species, *S. chinensis* (bei wu wei zi).

**A. Fruit**

**Surface view:** Exocarp of polygonal cells with scattered oil cells; conspicuous cuticular striations are arranged radially around oil cells; cuticle over oil cells is smooth.

**Transverse section:** Exocarp of polygonal cells with embedded oil cells; thick cuticle is present; mesocarp of parenchyma cells with partially and slightly thickened walls and occasional collateral vascular bundles; oil cells are absent or infrequent; starch is present in mesocarp; endocarp is inconspicuous, with parenchyma similar to mesocarp.

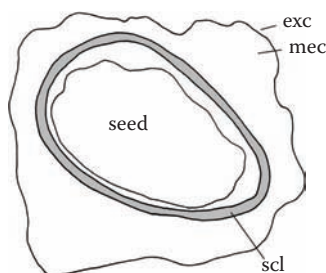
**B. Seed**

**Transverse section:** Testa consists of two sclereid layers: an outer layer of radially aligned palisade-like sclereids, approximately 50  $\mu\text{m}$  in height, with a narrow lumen

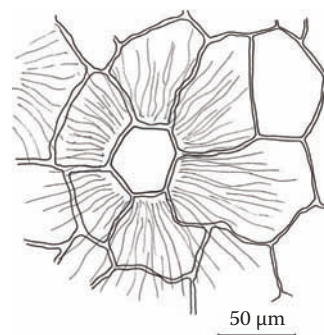
that widens slightly toward the inside tangential wall; the inner layer is composed of several rows of rectangular brachysclereids that have numerous pits; inside the sclereid layer is a layer of thin-walled cells containing yellow oil droplets, followed by a red-brown layer of compressed cells; few fibers occur at the raphe; endosperm of nearly quadratic, thin-walled, colorless cells containing oil droplets and aleurone.

**Starch:** Abundant in fruit; simple or compound granules; individual granules are subspherical or subpolyhedral, up to 10  $\mu\text{m}$  in diameter; larger granules with a punctate or linear hilum.

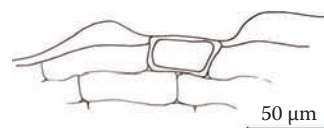
**Powder:** Fragments of the testa with sclereids (sv); dark brown exocarp (sv); dark brown parenchyma of the mesocarp; endosperm with numerous oil droplets; occasional fibers and vessels; starch.



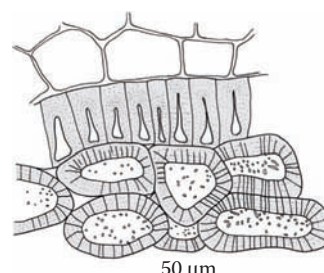
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