

Schisandra sphenanthera**Rehder & E. H. Wilson****Schisandra Fruit (Southern Schisandra Fruit)***Schisandrae sphenantherae Fructus*

Pinyin: Nan wu wei zi

Schisandraceae

S. sphenanthera is one of at least 38 species of *Schisandra* native to Asia. Known as southern schisandra fruit (nan wu wei zi) in China, it is sometimes used interchangeably with the northern *S. chinensis* (bei wu wei zi). The two may not be considered as medicinally equivalent. For a differentiation between *S. sphenanthera* and *S. chinensis*, see *S. chinensis*.

A. Fruit

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

Transverse section: Exocarp of polygonal cells with embedded oil cells; thick cuticle is present; dark brown exocarp and mesocarp cells; mesocarp of parenchyma cells with partially and slightly thickened walls with embedded

oil cells and abundant starch granules; infrequent collateral vascular bundles, with annular or spirally thickened vessel members; calcium oxalate prisms or irregular calcium oxalate aggregates are found throughout, but most frequently in the mesocarp; endocarp is inconspicuous.

B. Seed

Transverse section: Testa consists of two sclereid layers: an outer layer of radially aligned palisade-like sclereids, ~50 μm in height, having a narrow lumen that widens slightly toward the inner tangential wall; the inner layer, 120–150 μm thick, is composed of several rows of polygonal brachysclereids having numerous pits; the innermost testa consists of a layer of nearly quadratic cells that encloses the endosperm of thin-walled parenchyma containing oil droplets; fibers may occur at the raphe; endosperm contains aleurone.

Starch: Abundant in fruit; simple or compound granules, roundish or polygonal individual granules up to 10 μm in diameter; larger granules with a dotted 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 vessel fragments; starch (water).

