**Schizandra chinensis**

**Family:** Schizandraceae

**Names:** Wu Wei Zi (Chinese); Tyosen-Gomisi, schizandra

Description: Climbing deciduous vine with elliptic to obovate, pointed leaves, 2½-6 inches long. Solitary, cream to pink fragrant flowers are borne in late spring, followed on female plants by clusters of glossy scarlet fruits. The dried berries are black in color with a transparent membrae containing the two kidney-shaped seeds. Height 25 feet. It is hardy to zone 4 and is frost tender. It is in flower from April to May. The scented flowers are dioecious. The plant is not self-fertile. It is found throughout northern and northeast China and the adjacent regions of Russia and Korea.

**Cultivation:** Prefers a rich well-drained moisture retentive soil. Prefers a slightly acid soil but tolerates some alkalinity if plenty of organic matter is added to the soil. Requires some protection from the most intense sunlight. Plants succeed in quite deep shade and are suitable for north-facing walls. Plants are intolerant of drought. The fully dormant plant is hardy to about 3°F, though the young growth in spring can be damaged by late frosts. Plants climb by twining around supports. Any pruning is best carried out in the spring. Propagate by seed best sown in the autumn in a cold frame. Pre-soak stored seed for 12 hours in warm water and sow in a greenhouse in the spring. Germination can be slow and erratic. Prick out the seedlings into individual pots when they are large enough to handle and grow them on in light shade in the greenhouse for their first 2 years. Plant them out into their permanent positions in early summer. Cuttings of half-ripe wood, 5 - 8cm with a heel, August in a frame. Overwinter in the greenhouse and plant out in late spring. Layering of long shoots in the autumn. The fruit is harvested after the first frosts and sun-dried for later use.

**History:** Schisandra was first mentioned in Chinese medical texts during the later Han dynasty (AD 25-220). Different schisandras are used in northern and southern China; these were first differentiated in 1596 by Li Shi Zhen in his Compendium of Materal Medica. *S. chinensis* is used by both men and women as a tonic for sexual energy and is popular with women because of its reputation for improving the complexion. The Chinese name means “five-flavor fruit,” because it has sweet and sour flavors in the peel and pulp, and acrid, bitter, and salty flavors in the seeds. The name wu wei zi means –flavored herb since this herb reputedly tastes of the 5 main elemental energies. It has a sour, salty, and slightly warm taste.

Schizandra is the source of several Oriental medicines, including “gomishi” in Japan, where it is utilized for tonic and
antitussive purposes. Classed as an adaptogen, Schizandra has a long history of folkloric use in China and Tibet and more recent folk applications in Russia.

Throughout the ages various groups of people have enjoyed the benefits of Schizandra. For example, in Northern China there lives a hunting tribe known as the Nanajas. Their hunting lifestyle means that they often set out on long and exhausting hunting trips under harsh conditions. But they always take along dried Schizandra fruit. A handful of the small red berries gives them the strength to hunt all day without eating.

This fruit helped Russian pilots to withstand lack of oxygen in their flights during the forties. In more recent years Schizandra has contributed to the success of the Swedish skiing team. In Russia, Schizandra is a registered medicine for vision difficulties, i.e. short-sightedness and astigmatism.

**Constituents:** lignans (schizandrin, gomisin, gamma-schisandrin, deoxy-schisandrin, pregomisin); phytosterols (beta-sitosterol, stigmasterol); volatile oil; vitamins C and e

**Properties:** antibacterial, stimulant, anti-toxic, anti-allergenic, antidepressant, glycogenesis stimulant, tonic, adaptogenic, Antirheumatic; Antitussive; Aphrodisiac; Astringent; Cardiotonic; Cholagogue; Expectorant; Hepatic; Lenitive; Nervine; Pectoral; Sedative;

**Energetics:** sour, warm

**Meridians/Organs Affected:** lungs, kidneys

**Properties:** astringent; tonic to kidneys; demulcent; anti-diarrheic, antitussive

**Medicinal Uses:** Wu Wei Zi is commonly used in Chinese herbalism, where it is considered to be one of the 50 fundamental herbs. It is an excellent tonic and restorative, helping in stressful times and increasing zest for life. Low doses of the fruit are said to stimulate the central nervous system while large doses depress it. The fruit also regulates the cardiovascular system. It is taken internally in the treatment of dry coughs, asthma, night sweats, urinary disorders, involuntary ejaculation, chronic diarrhea, palpitations, insomnia, poor memory, hyperacidity, hepatitis and diabetes. Externally, it is used to treat irritating and allergic skin conditions. The seed is used in the treatment of cancer. The plant is antirheumatic. A mucilaginous decoction obtained from the branches is useful in the treatment of coughs, dysentery and gonorrhea.

Schisandra is known to stimulate the nervous system, increasing the speed of reflex nervous responses and improving mental clarity. In China, schisandra berries have traditionally been prescribed to treat mental illnesses such as neuroses. It may be a useful clinical agent for reversal of CNS depression. The berries are also given to improve concentration and coordination and are a traditional remedy for forgetfulness and irritability. Schisandra’s effectiveness for treating these problems has now been borne out by research.

Schisandra stimulates the uterus, strengthening, rhythmic contractions. Research has shown that in common with ginseng, schisandra has adaptogenic properties, helping the body to adapt to stress. Schisandra is a major tonic herb and acts throughout the body, strengthening and toning many different organs. Probably best known as a sexual tonic for both men and women, schisandra reputedly increases the secretion of sexual fluids and, in men, it also improves sexual stamina. Schisandra has proven benefits for the liver and is used in the treatment of hepatitis and poor liver functions. Although a stimulant, schisandra is used in Chinese medicine to “quiet the spirit and calm the heart.” It is given for insomnia and dream-disturbed sleep, and is a fine example of how adaptogenic herbs often work in apparently contradictory ways to restore normal body function.

The drug is both astringent and demulcent, depending on the condition of the patient’s fluid balance: in cases of fluid excess, it dries; in cases of fluid deficiency, it moistens. In addition, this herb protected against the
narcotic and sedative effects of alcohol and pentobarbital and exposure to the highly toxic ether, in mice. Polo horses given the berry extract of this species showed a lower increase in heart rate during exercise, a quicker recovery of respiratory function, a reduction of plasma lactate, and improved performance.

Research: A 1990 study reported that a lignan component of Schizandra fruit suppresses the arachidonic cascade in macrophages. The AA cascade pushes the production of leukotrienes, which may play a role in inflammatory diseases. By inhibiting the arachidonic acid cascade, Schisandra both protects the liver and stimulates the immune system. Research into schisandra has focused largely on the lignans, which have a pronounced anti-hepatotoxic action. Up to 30 different lignans have been identified in schisandra, which all contribute to this effect. Research from 1972 onward has reported the beneficial action of schisandra on the liver, and one clinical trial indicated a 76% success rate in treating patients with hepatitis with no side effects being noted.

The herb is used in the treatment of respiratory infections such as chronic coughs, shortness of breath, and wheezing. Schisandra is used to tone up and strengthen kidney function and to help the body to balance levels of fluid, making it helpful for treating night sweats, thirst, and urinary frequency. Recently, Chinese herbalists have started to use schisandra to treat urticaria (hives) and other skin problems, including eczema. It is usually given for these conditions in the form of a medicinal wine. It is used for a wide variety of other physical disorders, including diarrhea and dysentery, as well as to help improve failing sight and hearing. It is also useful for chemotherapy support.

TCM:
Indications: chronic coughs; asthma; thirst; profuse perspiration due to empty ailments; spermatorrhea; nocturnal emissions; profuse and frequent urination; chronic diarrhea
Contraindication: early stages of colds with cough

Dosage: Schisandra fruit: 1-6 grams per day.
Tincture - 2-4 ml three times per day
Decoction: for coughs and shortness of breath, decoct 5 g crushed berries with 100 ml water. Divide into 3 doses and drink during a 24 hour period.

Toxicity: Side effects involving schisandra are uncommon but may include abdominal upset, decreased appetite, and skin rash.

Other Uses: A viscid mucoid material is obtained from the fruit and the branches, it is used as a size for paper and as a hair dressing. The dried wood is charmingly fragrant.

Culinary Uses: The fruit is eaten raw or cooked. It is usually dried and used on journeys as it is very sustaining. Rich in sugars, it has a sweet/sour flavor. In Russia a paste made from the fruit is mixed with Actinidia arguta in order to counteract the insufficient acidity of that species. The fruit is about 6mm in diameter and is borne in a grape-like bunch about 10cm long. The young leaves are cooked and used as a vegetable.

References
Plants for a Future Database

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