

Nanking cherry

Prunus tomentosa



Nanking cherry scientifically known as *Prunus tomentosa* is a popular shrub belonging to Rosaceae (Rose family). The plant is native to northern and western China (including Tibet), Korea, Mongolia, and possibly northern India (Jammu and Kashmir, though probably only cultivated there) and naturalized in Japan, Russia, and other northern regions of the continent. It has become a staple back yard garden plant in Russia and much of Eastern Europe. **Nanjing cherry, Korean cherry, Manchu cherry, downy cherry, Shanghai cherry, Ando cherry, mountain cherry, Chinese bush cherry, Chinese dwarf cherry, Mongolian cherry, Aengdo, Aengdonamu, Mao Yingtao, Maotao, Maoyingtao, Yeyingtao, Yusura ume, Luddkörsbär and Japanische Mandelkirsche** are some of the popular common names of the plant.

It is commonly called downy cherry in recognition of its downy leaves, downy stems and downy fruits. Genus name *Prunus* comes from Latin means plum or cherry tree. Specific epithet *tomentosa* means thickly matted with hairs. The plant is harvested from the wild for local use as a food, and is sold in local markets. It is occasionally cultivated as a fruit crop in Asia, and is commonly grown as an ornamental tree. Fruit is edible but of variable quality

ranging from tart to sweet. Fruit may be used in pies, jams or jellies. Birds love the fruit. With proper care and maintenance, the tree can live up to 50 years. Without care, plants have supposedly lived 20 years or more.



Fruit

Nanking cherry bushes need another Prunus plant to pollinate them. In other words you'll need to have another Nanking cherry nearby, or any type of cherry, or a plum, or an apricot, and so on.

The clusters of fruit are nestled in among the leaves, spaced out at intervals along the branches. Nanking cherries are quite small, measuring 1- 2 centimeters in diameter (about the size of a blueberry). Their pale pink to bright cherry red skin is shiny and smooth, and the pulp is juicy. Each fruit contains one seed, much like other cherries. Nanking cherries are sweet and tart.

Unlike the image of cherries that most of us have in our brains, Nankings are connected to the branches of the shrub by very short stalks. They do not grow in the drooping clusters, but rather in lines up and down the length of the branches.

Health Benefits of Nanking Cherry

Listed below are some of the health benefits of using Nanking cherry



Promote Hair Growth

Earlier research had found that Nanking cherry has protective action on skin tissues and its subsidiary organs. It has also shown a strong role in promoting hair growth.

When *Prunus tomentosa* thumb total flavone (PTTTF) was continuously used on external local parts of phalacrolosis mouse models. It was discovered that PTTTF had significantly promoted the hair growth cycle and follicle maturation. However more research is required.

Anticancer Activity

Research shows that phenylpropanoid sucrose esters, isolated from leaves of Nanking cherry have shown cytotoxic activity against four human cancer cell lines tested.

The cytotoxic activity of these isolates was stronger when compared with the positive control 5-fluorouracil used. The results also indicate these isolates might be a promising source for anti-cancer drug candidates.

Anti-oxidant and Inhibitory Activity

Nanking cherry seeds consist of flavonoids that are known to exhibit antioxidant activity.

Research had also revealed that flavonoids present in the seed extract of Nanking cherry were able to exhibit Antioxidant and Inhibitory activity on Nitric oxide and prostaglandin E2 production.

The DPPH radical scavenging assay had also shown that the antioxidant activity of some of the flavonoids was also higher than the positive control, Ascorbic acid.

Works against frostbites

Research conducted to know the effect of Prunus tomentosa thumb total flavone on frostbite had proven that, PTTTF has significant anti-frostbite effect.

Research also said that the total flavone can inhibit the MMP9 expression in frostbite tissues and IL-1 β in peripheral blood mononuclear cells to relieve the inflammation caused by frostbite.

Traditional uses and benefits of Nanking cherry

- In small quantities, hydrogen cyanide has been shown to stimulate respiration and improve digestion, it is also claimed to be of benefit in the treatment of cancer.
- In small amounts this exceedingly poisonous compound stimulates respiration, improves digestion and gives a sense of well-being.
- The fruit can also help lower uric acid levels in the blood, which can result in gout.

Culinary Uses

- Fruit can be consumed raw or cooked.

- The unripe fruits can be pickled.
- Seed can be consumed raw or cooked.
- The buds are cooked and eaten.
- Leaves are used for pickling of vegetables and mushrooms.
- Fruit is edible, being an ingredient of juice, jam, and wine, and in pickled vegetables and mushrooms.
- Nanking cherries are eaten fresh or used to make pies, jams and jellies.
- Use Nanking cherries to flavor vinegar or pickle unripe fruits.
- Fruits are processed into wine, syrup, jellies and pies.

Other Facts

- A green dye can be obtained from the leaves.
- A dark grey to green dye can be obtained from the fruit.
- It is an excellent windbreak hedgerow.
- Plants produce suckers freely.
- Flowers are pinkish – white fragrant that attract lot of beneficial insects.
- In Manchuria and the Midwest United States, the shrub is planted in hedgerows to provide a windbreak.
- The plant produces fruits after 3 years when grown from seed.



