Silver birch Σημύδα η κρεμοκλαδής Betula Pendula



Betula pendula, commonly known as silver birch, is a medium-sized deciduous tree, which is classified under Betulaceae family. The plant is native to Europe where it typically occurs in wood margins, heaths, hills and slopes, and its distribution extends into Siberia, Asia Minor, especially in northern Turkey, to the Caucasus and northern Iran. It has been introduced into North America, where it is known as the European white birch, and is considered invasive in some states in the United States and in parts of Canada. The tree can also be found in more temperate regions of Australia. It has been widely planted in Canada and the northern U.S. as an ornamental.

Some of the popular common names of the plants are Silver Birch, European white birch, Common Birch, Warty Birch, European White Birch, East Asian white birch, bed wen, birk tree, lady birch, lady of the woods and weeping birch. It is believed that the name "Birch" comes from the Indo-European word "bhereo" which means glossy white. The genus name Betula comes from the Latin bitumen" (= mineral pitch, asphalt), because the Gauls often made a kind of bitumen from Birch sap. The epithet pendula refers to the drooping male inflorescence (catkins), up to 10 cm long and the overhanging branches.

Plant Description

Silver Birch is a fast growing, striking, medium-sized deciduous tree that grows about 15 to 25 m (49 to 82 ft.) tall (exceptionally up to 31 meters (102 ft.)) with a slender trunk usually under 40 cm (16 in) diameter. The plant is found growing in dry and moist forests, eskers, rocky hills, drained mires, various marginal scrub, also a park and forestry tree. It is best grown in medium to wet, well-drained sandy or rocky loams. The root system of the silver birch varies according to soil conditions. Tap root is formed on dry places (e. g. sandy dunes). Shallow roots develop on wet sites

and on spoil heaps, mined land or bare land. The root system can be deep and lateral roots achieve even 40 m in length.

Bark

The bark is whiter than downy birch with scattered black fissures. The young twigs are typically covered in white 'warts', and feel rough to the touch. The bark becomes much more rugged with diamond shaped cracks as it gets older.

Health benefits of Silver Birch

Listed below are few of the popular health promoting health benefits of silver birch plant

1.Good for Immunity

Birch leaves can be consumed in the form of a tea to help boost the body's immune system. Leaves consist of antiviral and antibacterial properties that help protect the body against infection and also speed up recovery from any infection that you may have. Birch leaf tea also contains numerous natural antioxidants in the form of flavonoids and vitamin C which can further improve general health and help to reverse the damage done to the body by free radicals.

2. For Digestion

Drinking a few cups of birch tea made with the leaves and the bark can help to stimulate your digestive system and improved overall digestion. Because of its anti-inflammatory nature, it is highly effective in relieving digestive upset. The tea can also be used to relieve common digestive complaints like a cramp, abdominal pain, bloating and diarrhea.

Leaves also possess mild laxative properties meaning that they can be consumed to help relieve constipation and support more regular bowel movement. It has also been used throughout the centuries as a general digestive tonic.

3. Good for Inflammation

Leaves and the bark can be used to help make an anti-inflammatory tea to help treat various forms of inflammation. Bark, in particular, is high in betulinic acid which has strong anti-inflammatory activity. Because of this, birch tea can be used to help treat common joint conditions like arthritis and rheumatism. It can also be used to help relieve internal inflammation affecting the digestive and respiratory systems.

4. For Insomnia

Like many herbal teas, birch leaf tea may help promote a good night of sleep if you drink a cup or two before bedtime. The effects are probably mild and improbable to help you overcome more serious sleep issues, but if you are simply feeling a little on edge, it is worth giving it a go.



5. Beneficial for skin and hair

Leaves and the bark of birch tree consist of astringent properties making them an effective treatment for numerous skin conditions. Birch bark also contains excellent anti-inflammatory and antibacterial properties making it a good natural treatment for numerous inflammatory skin conditions. Conditions that birch may help treat include eczema and dermatitis.

To treat your skin with the leaves, soak birch leaves in a jug of water for at least a few hours and then strain the solution. Use the leaf water to wash your skin paying particular attention to the affected areas. Bathing in water infused with birch leaves is another effective way of treating the skin, prevent dandruff and to help strengthen your hair roots.

Birch leaves can also be added to a compress to treat the irritation or to relieve joint pain while you may also be interested in making your own oil.

6. Good for Urinary tract conditions

Birch leaves can be used to make a tea or juiced to help treat inflammation or infection in the urinary tract. It may also help treat edema and flush the kidneys. Birch leaves have diuretic properties meaning that a tea made from them can help

promote both the volume and the frequency of a person's urination. This, in turn, helps to flush uric acid, toxins and excess fluids throughout the body. It can also help maintain good liver and kidney health and may even help eliminate unsightly cellulite.

Ayurvedic Health benefits of Silver birch

- **Blood Purifier:** Use One tablespoon inner bark of Birch with one cup boiling water. Take One cup daily.
- **Urinary tract Infections:** Leaf tea of Birch is quite useful for Urinary Tract Infection. It can be prepared by boiling some leaves in a cup of water for 5-10 minutes. Drink unsweetened.
- **Aphthous Ulcers:** Boil the inner bark of Birch in some water. Use this water as a mouthwash.
- **Analgesic:** The essential oil of Birch can be applied externally to relieve Headache, Menstrual Cramps, Abdominal Cramps, Gout, Rheumatism and other pains.
- **Wounds**: Boil the bark in some water and use the liquid as a wash for Wounds.
- **Baldness**: Decoction of the leaves can be used as a hair rinse.
- Arthritis: Prepare infusion of 1 teaspoon of Birch bark and 1 teaspoon of Dandelion root. Add 1 slice of grated Ginger Root. Keep on low heat. Turn off the heat when it boils. Drink half a cup when it cools. Cautions: Do not use if you are sensitive to analgesic drugs.
- **Septicemia**: Take equal amount of Stinging Nettle Root, Horsetail leaves, Birch leaves, Dandelion leaves. Prepare a decoction. Take one cup once a day.
- **Kidney Stones:** Boil one tablespoon leaves of Birch in half cup water for 10 minutes. Let it stand for 2 hours. Add half tablespoon Baking Soda. Take One cup a day.
- Gallstones: Take Dandelion root, Milk Thistle, Birch Leaves and Stinging Nettle leaves in equal quantities. Make a tea by boiling all these herbs together and drink regularly to prevent Kidney and Gallstones
- **Kidney Tonic:**Take 30 gram Solidago Virgaurea, 5 gram Horsetail, 10 gram Spiny Restharrow, 20 gram Birch Leaves and 30 ml alcohol. Put all herbs in alcohol. Leave it for 2 to 3 days. After that, strain the preparation. Your tincture has ready to use. Put 10 drops in 20 ml of water and drink. Do this daily. It takes little more time than allopathy medicine but your problem will be cured completely.

Traditional uses and benefits of Silver Birch

- Bark is diuretic and laxative.
- Oil obtained from the inner bark is astringent and is used in the treatment of various skin afflictions, especially eczema and psoriasis.

- Bark is usually obtained from trees that have been felled for timber and can be distilled at any time of the year.
- Inner bark is bitter and astringent; it is used in treating intermittent fevers.
- Vernal sap is diuretic.
- Buds are balsamic.
- Young shoots and leaves secrete a resinous substance which has acid properties, when combined with alkalis it is a tonic laxative.
- Leaves are anti-cholesterolemic and diuretic.
- They also contain phytosides, which are effective germicides.
- An infusion of the leaves is used in the treatment of gout, dropsy and rheumatism, and is recommended as a reliable solvent of kidney stones.
- Decoction of the leaves and bark is used for bathing skin eruptions.
- Moxa is made from the yellow fungous excrescences of the wood, which sometimes swell out of the fissures.
- The German Commission E Monographs, a therapeutic guide to herbal medicine, approve Betula species for infections of the urinary tract, kidney and bladder stones, rheumatism.
- It cures various Skin conditions like Eczema, Psoriasis and Skin Eruptions.
- Oil extracted from the buds of the tree is used topically to cure Acne.
- Birch leaves extract or decoction cures Baldness and also, used to treat insomnia.
- It reduces the uric acid in the body when combined with garlic or onion.
- The herb is used to cure Cramps and Wounds.
- Decoction of bark is used to treat chronic Skin problems.
- It also aids in the conditions of Diarrhea, Dysentery and Cholera.
- Tea made up of the twigs and bark aids in ridding the mouth of the sores and Skin Eruptions as well.
- It is an effective herb in removing Intestinal Worms.
- Herbal tea prepared from Birch leaf is helpful in relieving Muscular pain.
- Juice of the leaves, while they are young, or the distilled water of them, or the
 water that comes from the tree being bored with an auger, and distilled
 afterwards; any of these being drank for some days together can help to break
 the stone in the kidneys and bladder and is good also to wash sore mouths."

Culinary Uses

- Inner bark can be consumed cooked or dried and ground into a meal.
- It can be added as a thickener to soups etc. or can be mixed with flour for making bread, biscuits etc.
- Inner bark is generally only seen as a famine food, used when other forms of starch are not available or are in short supply.
- Sap can be consumed raw or cooked.

- Sap can makes a pleasant drink.
- It is often concentrated into syrup by boiling off the water.
- Sap can be fermented into a beer.
- Young leaves can be consumed raw or cooked.
- Tea is made from the leaves and another tea is made from the essential oil in the inner bark.



Other facts

- Bark is used to make drinking vessels, canoe skins, roofing tiles etc.
- Tar-oil is obtained from the white bark in spring.
- It has fungicidal properties and is also used as an insect repellent.
- It makes a good shoe polish.
- An essential oil is obtained from the bark called'Russian Leather' has been used as a perfume.
- Decoction of the inner bark is used to preserve cordage, it contains up to 16% tannin.
- Oil similar to Wintergreen oil is obtained from the inner bark.
- It is used medicinally and also makes a refreshing tea.
- Resin glands are used to make a hair lotion.
- Brown dye is obtained from the inner bark.
- Glue is made from the sap.
- Cordage can be made from the fibers of the inner bark.
- This inner bark can also be separated into thin layers and used as a substitute for oiled paper.
- Young branches are very flexible and are used to make whisks, besoms etc.
- They are also used in thatching and to make wattles.
- Leaves are a good addition to the compost heap, improving fermentation.

- Wood is used for a wide range of purposes including furniture, tool handles, toys and carving.
- High quality charcoal is obtained from the bark. It is used by artists, painters etc.
- Wood is also pulped and used for making paper.
- It is a fast growing tree, increasing by up to 1 meter a year, but is short-lived.
- It can be used to improve soil quality for other plants to grow.
- Bundles of birch twigs were used to drive out the spirits of the old year.
- Gardeners still use the birch besom, or broom,to 'purify' their gardens.
- Bark is used for tanning leather.
- It is planted decoratively in parks and gardens and is used for forest products such as joinery timber, firewood, tanning,racecourse jumps and brooms.
- Slabs of bark are used for making roof shingles and strips are used for handicrafts such as wooden footwear and small containers.
- Dead twigs are also useful as kindling for outdoor fires.
- The silver birch is the national tree of Finland.
- It is commonly used as an ornamental plant for parks, gardens and urban environments.
- Catkin contains hundreds of seeds and a large tree can produce over 1 million seeds a year!
- Average maximum biological age of silver birch is approximately 100 years, although sometimes trees can survive up to the age of 150 years.
- It is known to keep away insects and prevent gnat bites when smeared on the hands.
- Wood has been used for thread bobbins, herring-barrel staves, broom handles and various fancy articles.
- Twigs were also used in broom-making and in the manufacture of cloth.

Precautions

- Aromatic and aliphatic hydrocarbons in birch tar are irritating to the skin.
- Do not use in patients with edema or with poor kidney or heart functions.
- Pregnant and breast feeding mothers should avoid the use of this herb.
- Birch leaves might cause the amount of salt in the body to elevate which in turn worsens the high bold pressure problems.