

UTOWN@UBC Nature Club



Plant Guide

**Make new friends while getting to know your
human, plant and animal neighbours!**



a place of mind



ubcbotanicalgarden
& centre for plant research



Bigleaf Maple

Scientific Name: *Acer macrophyllum*

Plant Classification: Angiosperm (flowering plant)

General: Bigleaf maple trees grow between 15 and 20 m in height (as high as a 3-storey building). They are often covered with mosses and ferns.

Leaves: Bigleaf maple has the biggest leaves of any maple tree. The leaves are palmate (usually with 5 lobes, like your hand) and they can be as wide as a ruler (30 cm) or bigger.

Flowers and Fruits: Big hanging clusters of yellow-green flowers come out in the spring, before the leaves. Maple fruits are called samaras (or helicopter seeds). Each fruit has one seed and one wing, but two fruits are stuck together until they are ready to fall. The wing on the samara allows the fruit to spin down to the ground.

Notes: Although maple syrup is usually made from the sap of sugar maples, it can also be made from bigleaf maples.

Photos: left - flickr Gilles Gonthier; right - wikipedia Angilbas, used though a creative common licence.



Douglas Fir

Scientific Name: *Pseudotsuga menziesii*

Plant classification: Gymnosperm (conifers and ginkgos)

General: This tree is the second tallest coniferous tree in the world. It can reach up to 120 m in height (as high as some skyscrapers).

Leaves: These conifers have flat needles arranged all around their twigs. The needles are about as long as a paper clip.

Cones: Conifers do not produce flowers or fruit, but cones. Coast Douglas fir cones are easy to recognize because they have a small three-pointed bract that sticks out between each scale (some think the bract looks like the hind feet and tail of a mouse that's hiding in the cone).

Notes: Did you know that many people use these as Christmas trees?

Photo: flickr brewbooks, used though a creative common licence.



English Daisy

Scientific Name: *Bellis perennis*

Plant Classification: Angiosperm (flowering plant)

General: This plant grows in lawns and moist areas at the sides of roads. It is a small plant, between 5 and 15 cm high (around the length of half a pencil). English daisy is considered a weed because it grows in places where people don't want it (lawn, garden, etc.).

Leaves: The leaves stay green all year round and are either round or shaped like a spoon. You won't find any leaves on the flower stem as the leaves only grow at ground level.

Flowers and Fruits: Each daisy we see is not a single flower. It is actually a lot of tiny flowers clustered together. Look closely at the yellow center. Each small piece is a flower itself, and each of the 15 to 30 white petals is also a tiny flower!

Notes: Did you know that this flower opens during the day and closes up at night?

Photo: flickr Purrrpl_Haze used through a creative common licence.



English Ivy

Scientific Name: *Hedera helix*

Plant Classification: Angiosperm (flowering plant)

General: This is a climbing plant. It can climb on trees and walls or creep and cover the ground.

Leaves: There are 2 types of leaves: young leaves are palmate (5 lobed, like a hand) and older leaves are cordate (heart-shaped). They are about the size of an open palm.

Flowers and Fruits: The flowers are greenish-yellow and very small. They turn into dark purple berries in the winter and are eaten by birds. Be careful, these berries are poisonous to humans!

Notes: This plant grows so fast that it is invading forests in BC. We are fortunate to have many teams of volunteers in our communities that pull English ivy from our parks and natural areas. For information on how you can help, visit: pacificspiritparksociety.org or stanleyparkeecology.ca

Photo: flickr zen used through a creative common licence.



Himalayan Blackberry

Scientific Name: *Rubus armeniacus*

Plant classification: Angiosperm (flowering plant)

General: This shrub (shrubs are smaller than trees and usually have more than one main stem) grows up to 3 m (as high as two people standing on top of one other). The stem is square and has dangerous prickles. It often grows on fences or on the side of the road.

Leaves: Each leaf is made of three or five leaflets (small leaf), which makes it a compound leaf. Each leaflet is ovate (egg-shaped), has teeth on the margins (on the edge of the leaf) and prickles underneath.

Flowers & fruits: The flowers are small and white or pink. They have 5 petals and are cup-shaped. You can find them in groups of 5 to 20 flowers. The fruit looks like a big, shiny, black raspberry.

Notes: Himalayan blackberry is a big problem in Vancouver. It grows fast and takes so much space that it prevents other plants from growing. But the berries are tasty! In August, grab a container and go blackberry hunting.

Photos: left - Daniel Mosquin; right - flickr Jinx McCombs, used though a creative common licence.



Tokyo Cherry

Scientific Name: *Prunus yedoensis*

Plant Classification: Angiosperm (flowering plant)

General: This tree can grow 8 to 12 m tall (as high as a big house) and has smooth bark with horizontal lines. It is often planted along streets.

Leaves: The leaves are ovate (egg-shaped) and have small sharp teeth. They measure 5 to 13 cm (as long as a juice box).

Flowers and Fruits: Each blossom has five pale pink petals. The flowers come out during the spring, before the leaves. The fruits are small, black, bitter cherries.

Notes: This is the most common cherry on the UBC Campus. Did you know that in Vancouver we have a Cherry Blossom Festival in the spring?

Photos: Douglas Justice.



Katsura

Scientific Name: *Cercidiphyllum japonicum*

Plant Classification: Angiosperm (flowering plant)

General: This tree grows up to 40 m (as high as a 5-storey building). It is often planted along city streets.

Leaves: The young leaves are usually ovate (egg-shaped), but as they age, they become cordate (heart-shaped). If you look closely at the edge of the leaf (margin), you can see rounded teeth (this is called a crenate margin).

Flowers and Fruits: The flowers are very small and hard to find. They begin to grow in early spring with the new leaves. The fruits look like tiny dry beans. When they split open they release many seeds.

Notes: In the autumn, when the leaves turn colour and fall to the ground, they smell like burnt sugar.

Photo: flickr MeganEHansen, used through a creative common licence.



Pacific Dogwood

Scientific Name: *Cornus nuttallii*

Plant Classification: Angiosperm (flowering plant)

General: This tree can grow up to 25 m (the same height as three houses stacked on top of each other).

Leaves: The leaves on this tree are ovate (egg-shaped) and can measure 8 to 12 cm long (half the length of a pencil).

Flowers and Fruits: The white “petals” we see are not actually petals, but white leaf-like structures called bracts. The real flowers are green and very small, and clustered together like a button surrounded by the bracts. The fruit is a compound berry (many berries fused together) containing 50 to 100 seeds.

Notes: The pacific dogwood flower is the provincial flower of British Columbia.

Photo: flickr Paul Shultz, used through a creative common licence.



Salal

Scientific Name: *Gaultheria shallon*

Plant Classification: Angiosperm (flowering plant)

General: Salal is a shrub (shrubs are smaller than trees and usually have more than one main stem). Salal usually grows 1.5 m high (the size of a short adult) but it may be smaller.

Leaves: The leaves are ovate (egg-shaped), thick, shiny and green all year round. If you look closely at the edges, they have small sharp teeth (serrated margin).

Flowers and Fruits: The flowers are pink or white and shaped like little lanterns. You can find them in groups of 5 to 15 on stems at the end of the branches. The fruits are hairy berries. They start out red but turn blue-black when ripe.

Notes: The fruits are edible. People gather them at the end of the summer to make jam.

Photos: left - flickr Peter Stevens; right - flickr m.gifford, used though a creative common licence.



Sweet Gum/Alligator Wood

Scientific Name: *Liquidambar styraciflua*

Plant Classification: Angiosperm (flowering plant)

General: This tree can grow up to 40 m (as high as a 5-storey building). It is often planted along streets.

Leaves: The leaves of this tree look like a star with 5 points. They are dark green in the summer, but like maple trees, they turn red and orange in the fall.

Flowers and Fruits: The tiny flowers are grouped together in the shape of a ball. The fruit is hard and very spiky.

Notes: Some people call this tree alligator wood because its bark looks similar to an alligator's skin!

Photos: left - flickr IES-MGB; right - flickr lauradanielle, used though a creative common licence.



Sword Fern

Scientific Name: *Polystichum munitum*

Plant Classification: Pteridophyta (ferns and horsetails)

General: These are the biggest ferns that grow naturally in the Vancouver area. They can grow up to 1.5 m tall (the size of a short adult).

Leaves: The leaves are called fronds and they grow from a central base. Each leaflet (individual pieces of the frond) is pointed, dark green and thick.

Spores: Ferns do not produce flowers or fruits, but instead produce spores to make new plants. Spores are like a fine dust. Clusters of red-brown spores can be found on the undersides of the fronds, on the back of the leaflets.

Notes: First Nations used to dig up the root, cook it and eat it.



Western Red Cedar

Scientific Name: *Thuja plicata*

Plant classification: Gymnosperm (conifers and ginkgos)

General: Western red cedars can grow up to 70 m tall (as high as 7 houses on top of each other).

Leaves: The leaves look like flat scales (almost like fish scales). Some people think that bruised leaves smell like pineapple.

Cones: Conifers produce cones instead of flowers or fruit. This tree has small cones (about the size of a peanut). They are green in the spring and turn brown in the summer.

Notes: This is British Columbia's provincial tree. Did you know that it can live for more than 1000 years?