

BIGLEAF MAPLE

Acer macrophyllum Pursh

Plant Symbol = ACMA3

Contributed By: USDA NRCS National Plant Data Center



Brother Alfred Brousseau
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Alternative Names

Oregon maple, broad leaf maple, big-leaf maple

Uses

Ethnobotanic: The inner bark was often dried and ground into a powder and then used as a thickener in soups or mixed with cereals when mixing bread. A fiber was obtained from the inner bark and used in making ropes, baskets, and crude dresses (Gunther 1981). The large leaves were used for storing food to help preserve them or burned in steaming pots to add flavor to food.

An infusion of the bark was used in the treatment of tuberculosis (Moerman 1998). A sticky gum obtained from the buds in the spring was mixed with oil and used as a hair tonic (Ibid.).

Economic: The light brown wood is used in making furniture, cabinets, paneling, musical instruments, and veneer. In Washington and Oregon, it is used in the interior finish of buildings, for axe, and broom-handles (Sargent 1933).

Wildlife: The seeds provide food for squirrels, evening grosbeaks, chipmunks, mice, and a variety of birds. Elk and deer browse the young twigs, leaves, and saplings.

Agroforestry: Bigleaf maple can be planted on sites infected with laminated rot for site rehabilitation. It can also accelerate nutrient cycling, site productivity, revegetate disturbed riparian areas, and contribute to long-term sustainability.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status, such as, state noxious status, and wetland indicator values.

Description

General: Maple Family (Aceraceae). Bigleaf maple is a native, long-lived medium to large sized deciduous tree that often grows to eighty feet tall. The leaves are simple, opposite, and very large between fifteen to thirty centimeters wide and almost as long (Farrar 1995). The flowers are yellow, fragrant, and produced in noddling racemes appearing with the leaves in April or May. The fruit is paired, 2.5 - 4 centimeters long, and brown with stiff yellowish hair. The bark is smooth and gray-brown on young stems, becoming red-brown and deeply fissured, and broken into scales on the surface (Preston 1989).

Distribution: *Acer macrophyllum* is distributed around the coast region of southeastern Alaska, on the West Side of the Cascades and Sierra Nevada from British Columbia through most of California. For current distribution, please consult the Plant profile page for this species on the PLANTS Web site.

Adaptation

Acer macrophyllum generally occurs in coarse, gravelly, dry to moist sites, often mixed with red alder, western redcedar, Douglas fir, and western hemlock. It attains its best development near borders of foothills, low mountain streams, and in alluvial river bottoms. Bigleaf maple is an extremely flood tolerant species.

Establishment

Propagation from Seed: Propagation by seeds is best when seeds are sown as soon as they are ripe in a

cold frame. Pre-soak the stored seeds for twenty-four hours and then stratify for two to four months at 1-8°C. The seeds can be harvested when they have fully developed but before they have dried and produced any germination inhibitors and sown immediately. If the seeds are harvested too soon they will produce very weak plants or no plants at all (McMillan 1985).

Propagation from Cuttings: Cuttings of young shoots should be done in June or July. The cuttings should consist of two to three pairs of leaves and one pair of buds on the base. Cuttings should be placed in a plastic bag to prevent moisture loss. They must not be allowed to wilt. Trim the cuttings below the lowest node to remove the lower leaves leaving three or four at the tip. A rooting hormone may be applied to improve rooting before planting. Insert the cuttings in a rooting medium up to half their length so the leaves do not touch each other. The cuttings will root in two to three weeks, after which they can be potted (Heuser1997).

Management

Seedlings should be placed into individual pots when they are large enough to handle and grown there until they are twenty centimeters or taller before planting them into their permanent positions. Pruning should be done in the winter or early spring to remove the weakest branches to allow for the passage of more light.

Cultivars, Improved and Selected Materials (and area of origin)

Readily available through native plant nurseries or seed vendors.

References

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Bigleaf Maple Complex. FOREWORD. Managing competing vegetation during reforestation can be challenging. A Bigleaf maple is found at low to mid-elevations in the Coastal Douglas-fir (CDF) and Coastal Western Hemlock (CWH) biogeoclimatic zone of southwestern British Columbia. The northern limit of its range is found at Broughton Island near the mouth of Kingcome Inlet (50°51'N latitude). This range includes much of Vancouver Island, with the exception of the northern tip. Bigleaf maples are easy to identify from afar because of their wiggly outline with low sweeping branches, and are usually covered in thick mats of moss, lichen and ferns. These trees are actually known to carry the highest quantity of epiphytes than any other in our area, and mosses often grow so thick on oldgrowth big leaf maples that they form a soil of their own which allows other species of mosses as well as ferns and even small sprouting western hemlocks to take root. Bigleaf maple started a noticeable decline in some westside areas of Oregon and Washington starting around 2010. The most severe bigleaf maple decline has been observed in the Puget-Willamette lowlands, at low elevation sites in the Cascade foothills and east-slope.