

Acer saccharum

[Synonyms : *Acer barbatum*, *Acer dasycarpum*, *Acer eriocarpum*, *Acer palmifolium*, *Acer saccharinum*, *Acer saccharophorum*, *Saccharodendron barbatum*]

SUGAR MAPLE is a deciduous tree. Native to central and north-eastern North America it has small greenish-yellow flowers, and leaves that turn from a bright orange to dark crimson in Autumn.

It is also known as *Acero de zucchero* (Italian), *Acero zuccherino* (Italian), *Ahorn* (German), *Arce del azúcar* (Spanish), Bird's eye maple, Black maple, *Cha-ha-sa* (Dakota North American Indian), Curly maple, *Eder hasukar* (Hebrew), *Érable à sucre* (French), Hard maple, *Javor cukrodárný* (Czech), *Javor cukrový* (Czech), *Klen sakharnyj* (Russian), Montpellier maple, *Na-sa-k* (Winnebago North American Indian), North American sugar maple, Rock maple, Rough maple, *Satou kaede* (Japanese), Silver maple, *Sockerlönn* (Swedish), *Sokerivaahtera* (Finnish), Striped maple, Sugar, Sugar tree, *Suikeredoorn* (Dutch), *Sukeracero* (Esperanto), *Sukkerløn* (Danish), *Sukkerlønn* (Norwegian), Sweet maple, *Tath isfendan ag* (Turkish), Thumb-nail maple, White maple, and *Zuckerahorn* (German).

Saccharum is derived from Latin *saccharum* or *saccharon* (sugar) meaning 'sugary'.

The tree's sap, which is the source of maple sugar and maple syrup, is (nutritionists point out) more wholesome than sugar and was being used by North American Indian tribes, including the Dakota, Algonkin, Malecite, Cherokee, Iroquois, Menominee, Meskwaki, Chippewa, Mohican, Micmac and Potawatomi tribes, when Europeans were still relying on honey as their prime sweetener. Around the 1700s the Indians were collecting it in containers made of bark or skin and when Henry Rowe Schoolcraft (1793-1864) the American ethnologist and geologist, visited them in 1823 he learnt that although the sap was kept in large oxhide vats, it was by then being boiled in metal kettles. The Menominee were well versed in the techniques and attended their sugar camps in the Spring when the sap was flowing. They stored the prepared and colour-graded sugar in birch-*(Betula)* baskets (caulked with fir pitch) – baskets of various sizes sufficient to hold from 25-75 lb. of sugar.

The Chippewa tribe in particular prepared maple sugar for trade with tribes outside the range of the tree, and the sugar became a significant trading commodity forming a staple of the tribe's domestic economy.

Eventually more modern techniques were introduced and at one time Massachusetts alone produced over 40 tons of maple sugar annually. The orange sap is tapped from the trunk in early Spring (the sap begins to rise in the trunk in about March) and yields clear golden, maple syrup with a distinctive aromatic flavour. Further progressive processing (boiling) gives a syrup, then sugar, then 'butter' and ultimately a flavouring essence. The sap is also used to make a cider-like drink and an aromatic vinegar. Today the sap is used commercially to produce maple sugar (or syrup) which is in turn employed by the food industry for confectionery, puddings and ice cream. Maple syrup also provides a commercial flavouring for tobacco.

Although use of the processed sap as a sweetener was common among the tribes, individual tribes had other varied uses for it. For instance the Iroquois added water and black

raspberries (*Rubus occidentalis*) or thimbleberries (*Rubus parviflorus*) to the sap to make an everyday non-alcoholic drink which they also drank during longhouse rituals. They fermented the sap to make alcohol, and they used the maple sugar to make a beer. In contrast both the Chippewa and the Potawatomi tribes drank the sap as it was tapped directly from the tree. The Iroquois made bread with the dried, pounded and sifted bark, and the Meskwaki and Chippewa tribes used the maple syrup as an alternative to salt for seasoning meat and other food. Some tribes allowed the maple sap to sour to make vinegar – the Potawatomi cooked venison in it and then sweetened the meat with maple sugar before it was eaten.

Sugar maple leaves featured in the designs of Meskwaki beadwork.

The North American Cherokee Indians used the wood for carving, for making furniture, and as building material. Both the Chippewa and the Cherokee used the tough wood for cooking paddles – the former also used it for making other household items such as bowls, and the Malecite tribe used the wood for torch handles. Bows and arrows were made from sugar maple wood by the Micmac Indians.

North American settlers also used the red tinged, light grey-brown wood (sometimes with knots caused by twisting of the silver grain – which gives it a distinctive bird's eye marking) for house-building and shoe lasts, as well as furniture (it takes a satin-like polish) – and in modern times it can often form the main beam in a piano. The heavy sugar maple wood is used for many kinds of flooring, in squash courts, bowling alleys, gymnasia and dance floors, as well as those on ship and in industrial buildings. This durable hard wood has also been used for the floors of Underground trains in Britain – and in addition, until quite recently, for the escalator treads (or steps) in the Underground stations. In the past it has also provided fuel.

Sugar maple had some medicinal uses for some local North American Indian tribes. Records declare that the Mohican tribe from the Connecticut area, and the Potawatomi around Wisconsin used the inner bark for treating coughs, while the Iroquois are said to have eased sore eyes with sap, and used an infusion of the bark as an ingredient in a potion taken by any of their forest runners who suffered from shortness of breath.

In the United States sugar maple became a tree emblem for the state of New York in 1956, and the states of Vermont, West Virginia and Wisconsin in 1949.