

White Mulberry (*Morus alba*)

DESCRIPTION:

White mulberry was introduced to the eastern United States in the 1700s by the British in an attempt to establish a silk industry. Originating from China, it now occurs throughout the United States, largely spread by bird droppings. Mulberries can be found growing in woodlands, meadows, fence rows, field edges, and urban waste areas. Many consider white mulberry to be a severe threat to the native red mulberry (*Morus rubra*). The pollen of more abundant white mulberry overwhelm that of red mulberry, causing many hybrid mulberries to form. Red mulberry's genes may eventually disappear because of genetic pollution from the more aggressive white mulberry. Though tasty, the berries are best eaten in moderation since they are a mild diuretic. The unripened fruit and sap of the plant can cause gastrointestinal distress and hallucinations if eaten in sufficient quantities. The wood is fairly dense, hard, rot resistant, and a high BTU value. As such, trees cut for ecological restoration projects can be utilized for home heating, woodworking and building outdoor structures.

IDENTIFICATION:

The easiest way to identify white mulberry is by its distinct leaves. The leaves have toothed edges and are smooth and usually glossy on top, varying in shape from heart-shaped to deeply lobed. Immature fruit range in color from white to red turning a dark purple when mature in mid-summer. With spreading branches white mulberry can grow to about 40 ft. Like milkweed, mulberries have a milky latex sap that exudes from a damaged leaf stem.

For winter identification, the branches and bark have some key characteristics: The bark is light gray to yellowish with ridges or furrows. Young branches have an orange or yellowish coloration, contrasting significantly from the more mature branches. Wounds on the tree will cause a distinctive dark stain on the bark.

CONTROL METHODS:

Organic: Seedlings can be hand pulled, but it may be difficult get all the root because of the way the roots spread. When removing saplings a sharp shovel, Parsnip Predator or a weed wrench will aid in removing the root. Mulberry will readily resprout if the tree is simply cut down. To prevent this, tie a heavy-duty black plastic bag around the stump or cover with a weighted bucket and leave in place for 2 growing seasons. Otherwise, repeated cutting of resprouts immediately after they appear will be needed for 1-3 growing seasons. Girdling, if done correctly, may also be effective (see reverse side).

Chemical: The most effective method of control is to cut the mulberry down and apply herbicide to the stump to kill the root. Use a triclopyr-based herbicide (Garlon® 4, Element® 4, etc.) mixed with mineral oil or concentrated glyphosate (Roundup®, etc.) mixed with water (as described on the herbicide label). Stump treatments work well throughout the year except when sap is flowing heavily in the spring.

Younger plants, less than 6" in diameter, can also be treated by chemical girdling, by applying triclopyr diluted in mineral oil at a higher concentration in a ring around the stem.

For saplings and resprouts, a foliar application of triclopyr or glyphosate to the leaf surface is effective. Always read herbicide labels carefully before use and always apply according to the instruction on the product label.

NATIVE ALTERNATIVES:

Red Mulberry (*Morus rubra*) is an obvious replacement for white mulberry, it has larger leaves which are less often deeply-lobed, and a more charming growth form. Other similar sized trees that produce edible fruit include hawthorns (*Crataegus* spp.) cherries and plums (*Prunus* spp.) and serviceberry (*Amelanchier* spp.).

