

## white mulberry

*Morus alba*

### Identification:

### Moraceae (Mulberry family)

**Common** Perennial tree, deciduous **Height:** 30-50' **Width:** 30-40' **Leaf Arrangement:** alternate  
**Flower:** White, Yellow **Blooms:** Mid-spring to Late spring **Fruit:** Black berry **Fall Color:** Yellow

The easiest way to identify white mulberry is by its distinct leaves. The leaves have toothed edges and are smooth and glossy on the upper surface, varying in shape from heart-shaped to deeply lobed, often symmetrically as in Figure 1, but sometimes asymmetrically. Fall color is yellow, and white mulberries typically change color and drop their leaves about a week behind most other trees, making them stand out for a short period of time. Flowers bloom from mid to late spring and are unimpressive pale-green spiky catkins (Figure 6). Immature fruit range in color from white to red turning a dark purple when mature in mid-summer (Figure 4). With spreading branches white mulberry can grow to about 40 ft.

For winter identification, the overall structure of the tree is typically asymmetrical, chaotic and unappealing, though generally upright, less likely to lean and sprawl than the similar looking boxelder. Mature bark is fairly nondescript, being light gray to yellowish with ridges or furrows. However, the bark of younger mulberries, and smaller branches, is smoother, and has a distinctive orange or yellowish coloration (Figure 3). Damage to the bark and branches is common and mulberries will weep a milky white sap from these wounds. Over time this will cause distinctive dark stains on the bark (Figure 2). Buds are small and reddish, with dark edges on the scales.



# Weed Information Sheet:

white mulberry

*Morus alba*

**AKA:** Russian mulberry



**NR-40 Restricted**

## **Description & Impact:**

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.

## **Control Methods:**

**Organic:** Seedlings can be hand pulled. When removing saplings a sharp shovel or Parsnip Predator will allow you to sever the root a few inches below the soil surface. 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 until the roots are exhausted. Do the initial cut in late-spring after leaf-out for best results. Girdling, if done correctly, may also be effective.

**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 "cut stump" mix of triclopyr (Garlon® 4, etc.) mixed with mineral oil or glyphosate (Roundup®, etc.) mixed with water. 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 in mineral oil in a ring around the trunk. 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 apply according to the instruction on the product label.

## **Citations:**