Scientific Name: ***Albizia julibrissin*** **Common Name: Mimosa**

Updated: 5/5/2016

A. **Priority: D**

B. **Description –** Mimosa is a deciduous, suckering, broad-spreading tree to 12 m (40 ft.) tall, but usually 3-6 m (10-20 ft.), with smooth, gray bark. Leaves large, alternate, with a lace-like appearance, twice compound, 5-15 pairs of pinnae each bearing 10-25 pairs of leaflets (even-pinnate); leaflets to 1.5 cm (0.6 in) long, oblong and curved slightly sideways, tips and bases asymmetrical, tips pointed, central vein offset, glabrous and soft green above, glaucous and paler green below; petiole with noticeable, round-elliptic nectary gland at base. Flowers are pink or pinkish white, with very long, showy stamens, born in pom-pom-like clusters 2-5 cm (1-2 in) wide at branch tips. Fruit is a long, flat, light brown, papery pod, to 20 cm (8 in) long by 3 cm (1.5 in) wide, not opening and hanging in persistent clusters after leaf fall.

C. **Damage and threats –** Mimosa is a strong competitor in open areas or forest edges due to its ability to grow in various soil types, ability to produce large amounts of seed, and its ability to resprout when cut back or damaged. Mimosa reduces sunlight and nutrients available to desired species because of the denseness of the stand. An opportunist, mimosa will take advantage of disturbed areas, either spreading by seed or germinating in contaminated soil. Mimosa is often seen along roadsides and open vacant lots in urban/suburban areas and can become a problem along banks of waterways, where its seeds are easily transported in water.

D. **Management Options –**

Mechanical Control: Power or manual saws can be used to cut trees at ground level. Control is best achieved at flowering before seed production. Cutting is an initial control measure and will require herbicide control or repeated cutting for resprouts. Cutting is most effective when trees have begun to flower to prevent seed production, but may require repeated cuts or an herbicide application to control sprouting. In the case where herbicide use is impractical, girdling can be effective on larger trees. Make a cut through the bark encircling the base of the tree, approximately six inches above the ground, ensuring the cut goes well below the bark. This will kill the top of the tree but the tree may resprout and require a follow-up treatment with an herbicide. Hand pulling will effectively control young seedlings. Plants should be pulled as soon as possible to prevent maturation. The entire root must be removed since broken fragments may resprout.

Chemical Control: Use of a systematic herbicide is the best option to control Mimosa. We recommend using aquatic formulations of herbicides in this region to limit potentially unwanted effects to the surrounding environment.

a. **Foliar Spray - –** This method involves spraying a dilute herbicide directly onto the plants leaves. Application needs to occur when foliage is present, sometime between full leaf and the onset of fall for full effectiveness. Caution should be

taken when applying herbicide with this method as non-target plants can easily be killed by drift or overspray. Application should cover at least 80% of the leaves. To treat, use a 2-3% solution of aquatic triclopyr in water with a 0.5% non-ionic surfactant and apply directly to leaves until just before runoff. Air temperatures must be above 65 degrees and winds should be lower than 5 mph.

b. Cut Stump- This method involves cutting the stem as close to the ground as possible (no more as 5in. but no less than 1/4in.) and immediately applying a systematic herbicide. It is best to use this method between summer and fall, but it may be used as long as the ground is not frozen. To treat using this method, apply a 50% formulation of aquatic triclopyr or glyphosate directly to the cut stump. Treated plants should be continually monitored for re-sprouting. This method is recommended for treating small and large populations.

c. Hack and Squirt- Use an ax to make downward-angled cuts (45 degrees) into sapwood around the tree trunk as close to the ground as possible. Immediately squirt 1-2oz of a 50-60% solution of aquatic triclopyr or glyphosate into the cuts so that the bottom of the cut is covered, but liquid does not run out. Space the cuts so that about 1 to 2 inches of uncut living tissue remains between the cuts. If desired, a complete girdle can be used as well.

E. Recommended Management Strategy

a. We recommend treating all mature species first (>5in DBH) via the hack and squirt or girdle method prior to seed onset in July. This will ensure that seed production will not occur in the current year. Additionally, some smaller root suckers may also die in the process effectively limiting the amount of foliar spray needed for the next phase of treatment.

b. Secondly, foliar application of all resprouts and smaller saplings should occur. Ideally, this should be conducted in the late spring following the hack and squirt treatment. By conducting this treatment second, you are insuring that if any sucker sprouts do come up, you are treating them. Additional Hack and squirt should also be conducted at this time on any trees that were missed or did not die from the previous treatment. Depending on the size of the saplings, cut stump or basal bark applications may need to occur on species that are too tall to effectively foliar spray.

c. The process described in b above should be repeated at least once each year for three years to ensure control.

F. Additional and Updated Information

For additional information including photographs and the most up to date control recommendations please visit www.wachng.org/Plants.