INVASIVE PLANT FACTSHEET
Mimosa/Silk Tree (*Albizia julibrissin* Durazz.)

Problems: Mimosa trees form dense stands in wetlands and riparian and wetland habitats that reduce the amount of sunlight and nutrients available to native flora, reducing biodiversity of invaded sites. The tree flourishes in a wide range of soil types, produces a large seed crop each season, and can resprout from mechanical injury.

Regulations: No federal or MS regulations prohibiting movement of this plant.

Description: Mimosa is a deciduous tree with smooth, gray bark and foliage that forms a large, round canopy. The leaves are compound and bipinnate with six to twelve leaflet pairs per branchlet. Mimosa produces fragrant pink flowers that resemble pom-poms from May to July, and the fruits resemble a flat, beige pea pod and stay on the tree throughout the winter months and can remain dormant for many years.

Dispersal: Mimosa is native to Asia and was introduced to America in the 1700's as an ornamental species. This tree reproduces sexually and vegetatively. The seeds produced each year can remain dormant for up to 50 years, and the tree can resprout from a cut stump or damage to a stem. Seeds can be spread by water currents, contaminated soil movement, and aquatic fauna (waterfowl). Mimosa is present across the entire state of Mississippi.

Control Strategies: Physical - Hand-pulling seedlings can be effective in small areas but is ineffective in long term control over a broad area. Mechanical - Cutting the trees at ground level when trees are beginning to flower prevents seed production but must be followed by a chemical control to prevent vegetative propagation. Biological - there are no known biological control mechanisms for mimosa. Chemical - the herbicides triclopyr and glyphosate are effective mimosa control options. A foliar application of either herbicide solution can be applied to dense stands of trees or concentrated triclopyr can be applied to cut stumps (Table 1).

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References

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Tables and Figures

Table 1. Chemical control strategies for mimosa; the first row for each herbicide is the amount of formulated product needed for commercial applications (100-gal solution), the second row is the amount of product needed for private landowners (25-gal of solution; typical ATV sprayer size); all rates are in imperial units (see Turnage 2019 for instructions on calculating ac-ft; and to gain a greater understanding of how aquatic plant management and aquatic ecosystem processes affect each other).

HERBICIDE*,†	SPOT RATE	BROADCAST RATE	SURFACTANT	NOTES
Triclopyr	CUT STUMP	50% solution	-	Apply immediately after cut
Triclopyr	3%	3 gal/ac	1% (1 gal)	Apply to seedlings/saplings (<10 ft height)
		0.75 gal	1 qt	
Glyphosate	2%	2 gal/ac	1% (1 gal)	Apply to seedlings/saplings (<10 ft height)
		0.5 gal	1 qt	

*****Triclopyr rates are based on a 3.0 lb./gal amine formulation and glyphosate rates are based on a 5.4 lb./gal formulation; see Turnage (2019) regarding herbicide labels and formulation determination.

†This table is meant to be an aid in mixing herbicide solutions; it is not meant to be used as a replacement for herbicide label recommendations.

Figure 1. Image of Mimosa leaves and flowers (left) and seed pods (right). Image credit: L – L Ingram (www.bugwood.org); R – JR Allison (GA Dept. Nat. Res.; www.bugwood.org).

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