

Species Dataform and Scoresheet for *Albizia julibrissin* Durazzini (Mimosa, Silktree).

Species Dataform and Scoresheet		
<i>Albizia julibrissin</i> Durazzini (Mimosa, silktree)		
Native range: Asia		
Date evaluated: March 17, 2009		
	Answer Choices	Response
Introductory Questions		
1. Current federal and state regulations	Y/N	N
Comments: Appears on several invasive species lists (not laws) in the Southeastern U.S., including Georgia (Top ten listed), South Carolina (Significant threat), Florida (General list), and Tennessee (Rank 1, Severe threat), Kentucky (Significant threat), Virginia (Medium invasiveness), and the National Forest Service (Category 1, species known to be invasive and persistent) (Invasive.org 2009).		
2. Occurrence in the horticultural trade	Y/N	Y
Comments:		
3. North Carolina nativity	Y/N	N
Comments: Native to tropical Asia (Weakley 2008)		
4. Presence in natural areas	Y/N	Y
Comments: Found in disturbed areas and suburban woodlots(Weakley 2008). Naturalized along road-sides throughout southeastern United States (Pitman 2008). Generally not found in natural areas.		
5. Non-invasive cultivars	Y/N	N
Comments:		
	Maximum Point Value	Number of Points Assigned
Section 1. Ecological Impact		
1a. Impact on abiotic ecosystem processes	10	0
Comments: No known impacts on abiotic ecosystem processes.		
1b. Impact on plant community structure	20	5
Comments: Generally a pioneer species that is intolerant of shade (Pagad 2005). Dense stands of mimosa, usually along roads or disturbed areas, can significantly reduce sunlight and available nutrients for native plants (Demers et al. 2008). Mimosa can become a serious competitor along riparian areas where seeds are easily transported (Pagad 2005).		
1c. Impact on species of special concern	5	0
Comments: Strong competitor to native trees and shrubs (Demers et al. 2008), but impacts on species of special concern are unknown.		
1d. Impact on higher trophic levels	5	0
Comments: No known impacts on higher trophic levels.		
Section 1. Subrank	40	5

Section 2. Current Distribution and Potential for Expansion		
2a. Local range expansion	7	1
Comments: "Becoming a serious weed" (Weakley 2008).		
2b. Long-distance dispersal potential	13	8
Comments: Seed spread from nearby ornamental plantings allows for vigorous establishment in other areas (Demers et al. 2008). Seeds may be spread by water or wildlife that ingest the seeds (IFAS 2008). Fruits are flat and in pods. Problematic along waterways where seeds easily transported by water (IFAS 2008).		
2c. Reproductive characteristics	8	6
Comments: Reproduces both vegetatively and by seed (Demers et al. 2008). Germination is limited by hardseededness, but no additional dormancy factors are involved (Pitman 2008). Re-sprouts quickly if damaged, cut, or top-killed (Demers et al. 2008). Produces large seed crops (Demers et al. 2008). Produces root suckers (Demers et al. 2008). Seeds may be spread by water or wildlife that ingest the seeds (IFAS 2008).		
2d. Range of communities	6	0
Comments: Shade intolerant and seldom found in forests with full canopy cover (Pagad 2005).		
2e. Similar habitats invaded elsewhere	6	0
Comments:		
Section 2. Subrank	40	15
Section 3. Management Difficulty		
3a. Herbicidal control	5	3
Comments: Herbicides available for mimosa control include Garlon 4, Garlon 3A, Accord, and Transline (Demers et al. 2008). Chemical treatments are most effective if applied when seeds are present on the tree (Demers et al. 2008).		
3b. Nonchemical control methods	2	2
Comments: Plants resprout quickly if damaged, cut, or top-killed (Demers et al. 2008). Chemical treatments are necessary for full control (Demers et al. 2008). No known biological control agents (IFAS 2008).		
3c. Necessity of individual treatments	2	2
Comments: The majority of effective treatment methods using herbicides include basal-bark, cut stem, hack-n-squirt, and stem injections, but foliar applications are also effective (Demers et al. 2008).		
3d. Average distribution	2	1
Comments: Mimosa is a small to medium sized tree that may form dense stands (Demers et al. 2008).		
3e. Likelihood for reestablishment	2	2
Comments: Plants resprout quickly if cut and may grow up to 3 feet in a single growing season (Demers et al. 2008). Seeds may remain dormant for many years (IFAS 2008).		

3f. Accessibility of invaded areas	2	1
Comments: Often found along streamside and riparian areas (Pagad 2005) which may be difficult to reach.		
3g. Impact on native species and environment	5	2
Comments: Herbicides may damage or kill nontarget plants.		
Section 3. Subrank	20	13
Section 4. Benefits and Value		
4a. Estimated wholesale value	-7	-1
Comments: The annual estimated wholesale value attributed to this species is \$187,600 (Trueblood 2009).		
4b. Percentage of total sales	-5	-1
Comments: Among the producers that sell this species, the highest percentage of total sales attributed to this species from any one grower is estimated to be 1-5% (Trueblood 2009).		
4d. Ecosystem services	-1	0
Comments:		
4e. Wildlife habitat	-1	0
Comments:		
4f. Cultural and social benefits	-1	0
Comments:		
Section 4. Subrank	-15	-2
Overall Score	100	31
Overall Recommendation: Noninvasive and recommended for use – These species have limited ecological impact, distribution and invasive potential, and management difficulty in relation to economic value. They may be locally problematic but their reproductive biology and other traits limit their rate of invasion to natural areas. (Overall Score: 0 – 33)		
Summary: <i>Albizia julibrissin</i> (Mimosa) is noninvasive in North Carolina and may be recommended for horticultural use by the North Carolina Nursery and Landscape Association. Mimosa rarely invades natural areas. This species is shade intolerant and naturalizes primarily along roadsides and other disturbed areas. Mimosa has minimal ecological impacts in natural areas. Seeds may be spread from ornamental plantings. The difficulty of managing mimosa is moderate considering the availability of control methods, but management may be costly considering the time and labor required to effectively treat stands of mimosa. This species has low economic value to the nursery industry.		

References:

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