Species Dataform and Scoresheet for *Ligustrum japonicum* Thunb. (Japanese privet)

Species Dataform and Scoresheet		
***Ligustrum japonicum* Thunb. (Japanese privet)**		
Native range: Japan, Korea Date evaluated: March 31, 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 South Carolina (Severe threat), Tennessee (Rank 2, Significant threat), and USFS Policy (Category 1, species known to be invasive and persistent) (Invasive.org 2009).		
2. Occurrence in the horticultural trade	Y/N	Y
Comments: Widely planted as an ornamental plant (Miller 2003).		
3. North Carolina nativity	Y/N	N
Comments: Native to Japan and Korea (Weakley 2008).		
4. Presence in natural areas	Y/N	Y
Comments: Escapes into natural areas in southern U.S. (Munger 2003). However, Japanese privet has not naturalized in North Carolina to the extent that it has in more southern states.		
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: Unknown impact on abiotic ecosystem processes.		
1b. Impact on plant community structure	20	5
Comments: Commonly forms dense thickets and out-competes native species (Swearingen et al. 2002). May escape cultivation, establish monospecific stands, and quickly degrade native communities (Munger 2003). Outcompetes native woody species (Munger 2003).		
1c. Impact on species of special concern	5	0
Comments: Unknown impact on species of special concern.		
1d. Impact on higher trophic levels	5	0
Comments: Unknown impact on higher trophic levels.		
Section 1. Subrank	***40***	***5***
Section 2. Current Distribution and Potential for Expansion		
2a. Local range expansion	7	0
Comments: Occurs primarily in the southeastern U.S. (Munger 2003).		
2b. Long-distance dispersal potential	13	13
Comments: Produces an abundance of fleshy berries that are consumed by birds (Gilman and Watson 1993).		
2c. Reproductive characteristics	8	6
Comments: Produces an abundance of fleshy berries that are consumed by birds (Gilman		

and Watson 1993). Seeds may germinate where they fall (Gilman and Watson 1993). Propagated by seed or cuttings (Gilman and Watson 1993). Spread by rootsprouts and bird- and animal-dispersed seeds (Miller 2003). Plants propagate themselves prolifically from seed, readily reseeds, and cuttings are easily rooted (Scheper 2005). Reproduces from root or stump sprouts (Munger 2003). Grows in full sun and partial shade, tolerant of a range of soil types, not salt-tolerant (Gilman and Watson 1993).		
2d. Range of communities	6	4
Comments: Invades lowland and upland habitats in southern forests, but usually more prevalent in lowland areas (Miller 2003). Occurs in mesic habitats (Munger 2003). Natural communities of North Carolina (Shafale and Weakley 1990) = Low elevation mesic forests, low elevation dry and dry-mesic forest and woodlands.		
2e. Similar habitats invaded elsewhere	6	2
Comments: Grows in full sun and partial shade, tolerant of a range of soil types, not salt-tolerant (Gilman and Watson 1993). May invade floodplains, forests, wetlands, and fields (Swearingen et al. 2002). Invades intermittent stream bed and mesic woodland habitats in Texas (Munger 2003). Natural communities of North Carolina (Shafale and Weakley 1990) = River floodplains		
Section 2. Subrank	***40***	***25***
Section 3. Management Difficulty		
3a. Herbicidal control	5	3
Comments: Glyphosate herbicides are effective treatment methods (Miller 2003). Imazapyr is effective when applied to cut stumps, and glyphosate is effective when applied at bud break or soon after (Munger 2003).		
3b. Nonchemical control methods	2	1
Comments: Small infestations may be mowed, but stems should be cut back at least once per growing season to control the spread of privet (Remaley 2003). Young seedlings may be hand-pulled (Remaley 2003). There are no known biological controls for privet (Remaley 2003).		
3c. Necessity of individual treatments	2	2
Comments: Large stems should be cut and immediately treated with herbicide solution (Miller 2003).		
3d. Average distribution	2	1
Comments: Single plants (shrub, hedge, or small tree) or thicket-forming (Miller 2003).		
3e. Likelihood for reestablishment	2	2
Comments: Stems must be cut at least once each growing season to prevent reestablishment (Remaley 2003). Japanese privet produces an abundance of seeds that are dispersed by birds, which allows the plant to naturalize over a wide area (Scheper 2005) and possibly become reestablished.		
3f. Accessibility of invaded areas	2	1
Comments: Produces an abundance of fleshy berries that are consumed by birds (Gilman and Watson 1993). Seeds may germinate where they fall (Gilman and Watson 1993). Shade tolerant (Miller 2003) and may spread to areas that are difficult to access.		
3g. Impact on native species and environment	5	2
Comments: Nontarget plants may be killed or injured by root uptake of herbicides (Miller 2003).		

Section 3. Subrank	***20***	***12***
Section 4. Benefits and Value		
4a. Estimated wholesale value	-7	-4
Comments: The annual estimated wholesale value attributed to this species is $14,609,800 (Trueblood 2009).		
4b. Percentage of total sales	-5	-4
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 26-50% (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***	***-8***
Overall Score	**100**	**34**

Overall Recommendation: Moderately weedy and recommended for use with specific guidance – These species have less than high ecological impact, distribution and invasive potential, and management difficulty in relation to economic value. These plants should not be grown in close proximity to natural areas that have communities similar to those where this plant has been found to naturalize or near natural areas that have sensitive or threatened plants and/or natural communities. (Overall Score: 34 – 66)

Summary: *Ligustrum japonicum* (Japanese privet) is moderately weedy in North Carolina and may be recommended for horticultural use with specific guidance by the North Carolina Nursery and Landscape Association. The ecological impacts of *L. japonicum* are largely unknown, but this species may escape cultivation and form dense thickets that degrade native communities. Japanese privet has not naturalized in North Carolina to the extent that it has in more southern states. There is great potential for the additional invasion of Japanese privet to natural areas due to the high potential for natural dispersal. The difficulty of managing *L. japonicum* is moderate considering the availability of control methods, but management may be costly considering the time and labor required to effectively treat stands of this species. *Ligustrum japonicum* is extremely economically valuable to the nursery industry.

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