Chinese Privet (Ligustrum sinese Lour.)

Rights of Way

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Fig. 1. Mature Chinese privet along a fence row.

Fig. 2. Flowers of Chinese privet.

Fig. 3. Mature drupes on Chinese privet plants.

Introduction

Problems Created

Several species of privet have been introduced in the US since the 1700s, as garden plants and hedges, for which they are very effective. These non-native shrubs, which are difficult to distinguish from one another, include: common privet (*L. vulgare* L.), glossy privet (*L. lucidum* Ait. f.), Japanese privet (*L. japonicum* Thunb.), and Chinese privet (*L. sinense* Lour.). Chinese privet was introduced around 1952. The *Ligustrum* species easily escape cultivation to invade adjacent areas, where they form dense monocultural thickets. They now are established in the eastern part of the country.

Regulations

The privets as a group are so widespread that they have been omitted from US and regional noxious species legislation. In the southeast, Chinese privet is included in all state invasive species lists. It is considered one of the top ten weeds in AL and GA, a severe threat in KY, SC, and TN, a Category One invasive plant in FL, and is included in the state invasive plant lists of MS and VA.

Description

Vegetative Growth

Ligustrum sinense resembles Japanese privet, L. japonicum, the latter of which has larger and thicker leaves and generally is much less common in the Mid-South, though the two overlap in most of their US distributions.

Chinese privet is a semi-evergreen to evergreen, thicket-forming shrub capable of reaching heights of 30'. It tends to be multiple stemmed, with densely foliated branches that form very dense canopies. Stems may be opposite or whorled (more than two side branches per node), with branches often projecting outward at near right angles. The bark tends to be brownish gray with light colored lenticels and may become gray green and develop rusty or grayish pubescence (short, velvety hairs) with age. Leaves are opposite on the stems, at near right angles to stem, and usually ovate to elliptic with a rounded tip, often is minutely indented. They measure approximately 0.8" to 1.6" long and 0.4" to 1.2". wide, with entire margins. The blades generally are lustrous green above and pale green with a hairy midvein beneath.

Flowering

Ligustrum sinense flowers during April to June, producing abundant, terminal and sub-terminal axillary clusters of fragrant white flowers on short branches that thus form dense panicles at the ends of branches. The corolla is four-lobed, and stamens extend beyond the corolla. Fruit can be seen from July to March in dense clusters of ovoid drupes that hang on the stem or project outward. Drupes are 0.2" to 0.3" long and 0.16" wide, and contain one to four seeds. Fruit are light green in summer and turn dark purple to black in late fall to winter.

Dispersal

Privets grow readily from seed or from root and stump sprouts. These species escape cultivation by movement of seed, which is eaten and subsequently transported by wildlife, especially birds. Despite a reportedly low germination rate (5%-25%), the privets are highly effective dispersers and can be found in abundance in disturbed areas such as field and forest edges and urban and suburban environments.

Spread by

Human dispersal is largely by planting Chinese privet as an ornamental plant in landscaping.

Habitat

Chinese privet is a highly aggressive and troublesome exotic shrub, often forming dense thickets beneath which little to no understory is present. It can be found in bottom-land forests and along fencerows, where it gains further access to forests, fields, and rights-of-way. Chinese privet will colonize by abundant bird- and other animal-dispersed seeds, after which it can spread vegetatively by vigorous root sprouting. Once established, it is exceedingly difficult to control.

Distribution

Chinese and Japanese privet are found from Texas to Massachusetts, with *L. sinense* having the broader range of the two, covering about 15 states. In the Mid-South, Chinese privet is quite well documented in herbaria, having been collected in about half the counties of AR and MS, and almost every parish of LA.

Control Methods

Chemical Control

Several herbicides are effective in controlling Chinese privet including 2,4-D, 2,4-DP, glyphosate, imazapyr, triclopyr, metsulfuron, fosamine ammonium, and hexazinone. Herbicide applications can be made directly to plant foliage, at the base of stems, cut stumps, frill applications, and to the soil around Chinese privet. There are several different formulations of the same herbicide available as well as herbi-

cide mixes that can be used to control Chinese privet, so always read herbicide labels prior to applica-

tions. Basal herbicide applications can be made to the lower 20" of the stem using an appropriate herbicide adjuvant such as a crop oil. Basal applications are more effective on stems 6" in diameter or smaller. Cut stump applications are made to stumps immediately after cutting. Frill applications are made by cutting the outer layer of bark and cambium and applying the herbicide to the cut areas.

Mechanical Control

Hand pulling of young seedlings will prevent future seed production. Cutting or mowing mature plants prior to seed production will prevent seed dispersal and subsequent plant growth. However, any stumps or large shoots that are cut need to be treated with an appropriate herbicide to prevent the regrowth of plants from stumps.

Physical Control

Shading may prevent seed production, but will not kill the plant.

Table 1. Suggested chemical control methods for Chinese privet.

Herbicide	Method	Rate
glyphosate	Foliar spray, Broadcast	2% solution
triclopyr	Foliar spray, Broadcast	2% solution
	Basal, cut stump, frill	20% solution ap- plied directly to plants
imazapyr	Frill or soil application	2 to 6 pints/A
metsulfuron	Foliar spray, Broadcast	1 to 3 ounces/A
fosamine ammonium	Foliar spray, Broadcast	1.5 to 6 gallons/A
hexazinone	Soil application	2 to 4 gallons/A
2,4-D + 2,4- DP	Foliar spray, Broadcast	1 to 5% solution
	Basal, cut stump, frill	3 to 4% solution
imazapyr + glyphosate	Foliar spray, cut stump, frill	1 to 2 gallons/A
lmazapyr + metsulfuron	Foliar spray, Broadcast	25 ounces/A

References

Miller, J. H. 2003. Nonnative invasive plants of southern forests: a field guide for identification and control. Gen. Tech. Rep. SRS–62. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 93 p. Online resource at http://www.invasive.org/eastern/srs/index.html accessed [27 June 2007].

Miller, J. H., E. B. Chambliss, C. T. Bargeron. 2004. Invasive Plants of the Thirteen Southern States. Invasive.org: Invasive and Exotic Species of North America. Online resource at http://www.invasive.org/ accessed [27 June 2007].

Remaley, T. and C. Bargeron. 2003. Southeast Exotic Pest Plant Council Invasive Plant Manual. Southeast Exotic Pest Plant Council. Online resource at http://www.invasive.org/eastern/eppc/introduction.html accessed [27 June 2007].

Swearingen, J., K. Reshetiloff, B. Slattery, and S. Zwicker. 2002. Plant Invaders of Mid-Atlantic Natural Areas. National Park Service and U.S. Fish & Wildlife Service, 82 pp. Online resource at http://www.invasive.org/eastern/midatlantic/ accessed [27 June 2007].

USDA, NRCS. 2007. The PLANTS Database. National Plant Data Center, Baton Rouge, LA 70874-4490 USA. Online resource at http://plants.usda.gov accessed [27 June 2007].







