

Pest Alert

Florida Department of Agriculture and Consumer Services
Division of Plant Industry

***Ligustrum sinense*, Chinese Privet, Small Leaved Privet, a Recently Listed State Noxious Weed**

Patti J. Anderson, Patti.Anderson@FreshFromFlorida.com, Botanist, Florida Department of Agriculture and Consumer Services, Division of Plant Industry

Marc S. Frank, Marc.Frank@FreshFromFlorida.com, Botanist, Florida Department of Agriculture and Consumer Services, Division of Plant Industry

INTRODUCTION: The perennial shrub, *Ligustrum sinense* Lour. (Oleaceae), except the cultivar 'Variegatum', has been added to the Florida Noxious Weed and Invasive Species List. This plant was proposed for listing and evidence was presented to the state Noxious Weed Review Committee. Numerous ecological studies and weed assessments by the United States Department of Agriculture, and the University of Florida provided information. *Ligustrum sinense* is also listed by the Florida Exotic Pest Plant Council as an invasive species that has altered natural plant communities.

The committee found that the species exhibited the following invasive characteristics:

- shade tolerance, allowing the species to form dense stands in forest understories
- tolerance of poor soils
- copious fruit production
- seed dispersal by birds and other animals over wide areas
- seed dispersal by water and landscape waste
- vigorous resprouting from abundant root suckers

Chinese privet is now regarded as one of the major weeds of woodland habitats in the southeastern United States. Based on assessments of the invasion of natural areas by this species, *L. sinense* is now included on the list of regulated plants in Florida. It is unlawful to introduce, multiply, possess, move or release any noxious weed or invasive plant regulated by the Florida Department of Agriculture and Consumer Services, except under permit issued by the department.

IDENTIFICATION: Chinese privet is an evergreen to semi-deciduous shrub or small tree that usually grows to 2–7 m (16 ft) tall, but is sometimes larger. The root system is shallow, but extensive, and frequently produces suckers. Leaf arrangement is opposite to subopposite on long, thin twigs. The leaves are typically two-ranked (held in a single plane), giving the branches a flattened appearance (Fig. 1). The short petioles are 1–5 mm ($1/16$ – $3/16$ in). The leaf blades, usually 2–4 cm ($3/4$ –2 in) long, are ovate to elliptic in shape, with rounded to bluntly acute tips, and entire or undulate margins. The small white to off-white flowers are borne in clusters at the branch tips and the leaf axils. The short-stalked flowers have two exerted stamens, a cup-like green calyx bearing four small pointed teeth, and four petals that are fused into a short tube at the base (Fig. 2). The flowers are aromatic with an odor often described as disagreeable. The fruit are 4–5 mm ($1/5$ in) long, blue-black drupes that contain one to four seeds (Fig. 3).





Fig. 1. *Ligustrum sinense* (Chinese privet). The leaves are opposite and evenly spaced along long, thin, densely pubescent twigs and are typically two-ranked, giving the branches a flat appearance. Photography credit: James H. Miller and Ted Bodner, courtesy of Bugwood.org.



Fig. 2. *Ligustrum sinense* (Chinese privet). The small, fragrant, white flowers with exserted stamens are borne in short, conical panicles. Photography credit: Rob Curtis, courtesy of the [Atlas of Florida Vascular Plants](#).



Fig. 3. *Ligustrum sinense* (Chinese privet). Plants produce large quantities of blue-black drupes, which are consumed and dispersed by birds and white-tailed deer. Photography credit: James H. Miller, courtesy of Bugwood.org.

SIMILAR SPECIES IN FLORIDA: There are at least four other species of *Ligustrum* cultivated and naturalized in Florida, including Japanese privet (*L. japonicum*), glossy privet (*L. lucidum*), California privet (*L. ovalifolium*) and waxleaf privet (*L. quihoui*). Chinese privet can be distinguished from these other species by the following combination of characteristics: densely pubescent young branches; blunt-tipped leaves usually no more than 4 cm long; hairs present on the veins on the leaf undersides; flowers borne on pedicels (stalks); corolla tube equaling (not exceeding) the corolla lobes in length. Chinese privet might also be confused with the native Florida swampprivet (*Forestiera segregata*), but that species is glabrous (hairless) on the leaf undersides and its flowers lack petals.

DISTRIBUTION: Chinese privet is native to China, Vietnam and Laos. It is also widely naturalized globally, including the eastern and central United States, from southern New England west to Kansas and south to Texas and Florida. It is particularly problematic in wetlands and moist forests in the southeastern United States. In Florida, this species has been documented in 26 scattered counties, from the panhandle to Miami-Dade County.

ECOLOGICAL IMPORTANCE: Abundant seed production and dispersal by birds allow this species to invade natural habitats easily. Chinese privet escapes from abandoned homesteads, vacant lots and pastures and persistent stands alter nutrient availability and succession in forest habitats. This species further reduces the diversity of natural areas by shading seedlings of native ground covers.

DETECTION AND MITIGATION STRATEGIES: Chinese privet is most common on disturbed sites that are open, low-lying and moist, but can also form thickets in a wide variety of habitats, including upland hammocks, pinelands, floodplains, maritime hammocks, beach dunes and the edges of swamps, marshes, lakes and streams. The University of Florida/Institute of Food and Agricultural Sciences Extension has numerous publications with information about control of invasive plants (Langeland *et al.* 2011; Williams and Minogue 2008).

ADDITIONAL INFORMATION: Chinese privet was introduced to the United States as an ornamental shrub in 1852 and had escaped from cultivation in the Southeast by the 1930s. There are several cultivars with variegated leaves that are popular horticultural subjects, but only the variegated cultivar 'Variegatum' was excluded from Florida's Noxious Weed and Invasive Species List. The 'Variegatum' cultivar is considered a non-invasive, sterile form although research into the viability of its seeds continues.

This species has been known by several earlier names that are no longer accepted, including the following:

- *Ligustrum calleryanum* Decne
- *Ligustrum sinense* Lour. var. *multiflorum* Bowles
- *Ligustrum sinense* Lour. var. *villosum* (May) Rehder
- *Ligustrum villosum* May
- *Olea consanguinea* Hance
- *Olea walpersiana* Hance

See the DPI publication **Weed of the Month** for more information <http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Plant-Industry-Publications/Weed-of-the-Month>.

REFERENCES:

- Greene, B.T. and B. Blossey. 2012.** Lost in the weeds: *Ligustrum sinense* reduces native plant growth and survival. *Biological Invasions* 14: 139–150.
- Hart, J.L. and B.N. Holmes. 2013.** Relationships between *Ligustrum sinense* invasion, biodiversity, and development in a mixed bottomland forest. *Invasive Plant Science and Management* 6: 175–186.
- Langeland, K.A., J.A. Ferrell, B. Sellers, G.E. MacDonald and R.K. Stocker. 2011.** Integrated management of nonnative plants in natural areas of Florida. SP 242, Department of Agronomy, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. 27 p. <http://edis.ifas.ufl.edu/wg209> [accessed 2014 September 4].
- Mitchell, J.D., B.G. Lockaby and E.F. Brantley. 2011.** Influence of Chinese privet (*Ligustrum sinense*) on decomposition and nutrient availability in riparian forests. *Invasive Plant Science and Management* 4: 437–447.
- National Biological Information Infrastructure (NBII) and IUCN/SSC Invasive Species Specialist Group (ISSG). 2010.** *Ligustrum sinense*. Global Invasive Species Database. 1 p. <http://www.issg.org/database/species/ecology.asp?fr=1&si=241> [accessed 2014 September 5].
- National Resource Conservation Service. 2000.** Plant guide: Chinese privet *Ligustrum sinense* Lour. United States Department of Agriculture, National Resource Conservation Service (NRCS), Baton Rouge, Louisiana. 6 p. http://plants.usda.gov/plantguide/pdf/pg_lisi.pdf [accessed 2014 September 5].
- Plant Epidemiology and Risk Analysis Laboratory. 2012.** Weed risk assessment for *Ligustrum sinense* Lour. (Oleaceae) – Chinese privet. United States Department of Agriculture. Raleigh, North Carolina 17 p. http://www.aphis.usda.gov/plant_health/plant_pest_info/weeds/downloads/wra/Ligustrum_sinense_WRA.pdf [accessed 2014 September 5].
- Williams, R. and P. Minogue 2008.** Biology and management of Chinese privet. FR189, School of Forest Resources and Conservation Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. 4 p. <http://ufdc.ufl.edu/IR00001832/00001> [accessed 2014 September 10].
- Wilson, S.B., G.W. Knox, K.L. Nolan and J. Aldrich. 2014.** Landscape performance and fruiting of 12 privet selections grown in northern and southern Florida. *HortTechnology* 24: 148–155.
-