

FULL ACCOUNT FOR: Ligustrum sinense

Ligustrum sinense 简体中文 正體中文

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Scrophulariales	Oleaceae

common chinese privet (English), Chinese privet (English), hedge privet Common name

(English), xiao la (Chinese), small-leaf privet (English), Chinese ligustrum

(English), Chinese liguster (Afrikaans)

Synonym Ligustrum villosum , May

Ligustrum sinense, Lour. var. villosum (May) Rehder

Ligustrum calleryanum, Decne.

Ligustrum sinense, Lour. var. multiflorum Bowles

Olea consanguinea, Hance Olea walpersiana, Hance Ligustrum indicum, (Lour.) Merr.

Ligustrum microcarpum , Kaneh. & Sasaki Ligustrum sinense, var. stauntonii (DC.) Rehder

Ligustrum stauntonii, DC. Phillyrea indica, Lour.

Similar species Viburnum obovatum, Foresteria spp., Ligustrum spp.

Summary Ligustrum sinense, or Chinese privet, is a shrub or small tree native to China,

Vietnam and Laos that can grow up to 9 meters tall. Its flowers are small and somewhat unpleasantly fragrant and its fruits are dark blue or bluish-black. L. sinense has been reported in floodplains, wetlands and bogs, as well as in dry, moist and wet forests, waste places, roadsides and open stream systems. It is widespread and common, especially near towns, where it is deliberately planted. It may displace shrubs of alluvial forests and remain persistent in these areas. Chinese privet fruits are consumed by wildlife, particularly birds, which often excrete the seeds unharmed at distant locations where they may germinate and become established. L. sinense can easily escape cultivation to

invade adjacent areas and can form dense monospecific thickets.

view this species on IUCN Red List

Species Description

Ligustrum sinense is a deciduous shrub or small tree that typically grows to about 6m but may reach 9m. Its trunks usually occur as multiple stems with many long, leafy branches. Its bark is whitish-tan to gray in color and smooth in texture. Slender twigs are straight, rounded or four-angled below the nodes, and gray-green in color. Leaves are opposite, oval, pubescent on the underside of the midvein, and less than 5cm long. Small, white flowers develop at the end of branches in 5-7.6cm long clusters. Its fruits are oval, fleshy, less than 1.3cm long, ripen to a dark purple to black color, and persist into winter (Invasive.org, 2010; Batcher, 2000 Ulyshen et al, 2009).

Notes

Ligustrum spp. leaves are high in phenolic compounds that defend against herbivores, especially insects. The compounds work by inhibiting digestive enzymes and proteins (Konno et al. 1998, in Batcher, 2000).

System: Terrestrial



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Lifecycle Stages

Germination rates for *Ligustrum sinense* have been variously reported as low as 5 to 27% (Tennessee Exotic Plants Council 1996, in Batcher, 2000) and as high as 77% (Schopmeyer 1974, in Batcher, 2000). The pure variegated form is not known to produce viable seeds (H. Gramling, Tampa Bay Wholesale Growers 1998 personal communication, in FLEPPC, Undated). The species is capable of producing more than 2,000 propagules annually as 2,800 fruit per stem has been reported as an average annual production (Westoby, Dalby & Adams-Acton 1983 in DPI, 2009).

Uses

PIER (2003) states that this species is commonly bought as an ornamental and used for hedges. It has been identified as an important forage plant for deer in the southeastern U.S. (Stromayer *et al.* 1998, in Batcher, 2000).

Habitat Description

Ligustrum sinense commonly forms dense thickets in fields or in the understory of forests (Invasive.org, 2010). It grows in a variety of forests, shrublands, woodlands, flood plains, wetlands, and coastal areas, but also has a particular affinity for disturbed or urbanized locations like cleared fields or along roadsides (Batcher, 2000; Greene & Blossey, 2009; Williams & Minogue, 2008; PIER, 2010). Occurrences have been recorded from lowland areas and up to 1830 meters elevation (Williams & Minogue, 2008; PIER, 2010). L. sinese tolerates a wide range of soil conditions and is shade tolerant, and tolerates, or even benefits from mutilation, cultivation, or fire (PIER, 2005).

Reproduction

Ligustrum sinense is a perennial shrub that grows readily from seed or from root and stump sprouts. It may escape from cultivation when the fruits are consumed by wildlife, particularly birds, which often excrete the seeds unharmed at distant locations where they may germinate and become established (Batcher, 2000). An average square meter of canopy produces about 1,300 fruits (Burrows and Kohen 1986, in FLEPPC, Undated)

General Impacts

Ligustrum sinense is extremely invasive and forms dense monospecific layers in forest interiors and edges that outcompete, displace and shade out native vegetation (Batcher, 2000; DPI, 2009; Invasive.org, 2010; Morris et al, 2002; Zhang, 2009). It reduces native plant abundance and diversity (Green & Blosey, 2009; Wilcox &Beck, 2007). These reductions in species richness and overstory reproduction associated with *L. sinense* could impact long-term forest structure and ecosystem function (Loewenstein & Loewenstein, 2005). It has been found to have toxic effects on animals and macroinvertebrates (DPI, 2009b; PIER, 2005), and one study observed that beetle richness increased greatly after its removal (Ulyshen et al, 2009). It is also believed to have a negative impact on water quality (DPI, 2009b).

Management Info

Restoration potential is likely to be lowest where *Ligustrum* spp. occur in high densities and there is a high likelihood of continued dispersal of seeds into the restoration area. If attacked during the early stages of colonization, the potential for successful management is high.

Manual and mechanical, environmental/cultural, and chemical methods are all useful in varying degrees in controlling *Ligustrum* spp.

For details on preventative measures, chemical, physical, biological control options, please see <u>management</u> <u>information</u>.

Pathway

Ligustrum spp. have been cultivated and developed into several horticultural varieties, which were introduced to North America and New Zealand as a common hedge in landscaping (Batcher, 2000).



FULL ACCOUNT FOR: Ligustrum sinense

Principal source: Element Stewardship Abstract for *Ligustrum* spp. (Batcher, 2000)
Pacific Island Ecosystems at Risk (PIER), 2010. *Ligustrum sinense* Lour., Oleaceae
Department of Primary Industries, Victoria, 2009. Impact Assessment - Small-leaf Privet (*Ligustrum sinense*) in Victoria

Compiler: National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG)

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Review: Anon

Pubblication date: 2010-08-20

ALIEN RANGE

[1] AMERICAN SAMOA [1] ARGENTINA [3] AUSTRALIA [1] BERMUDA [1] FIII [1] GUADELOUPE [1] GUAM [2] NEW CALEDONIA [4] NEW ZEALAND [1] NORFOLK ISLAND [1] PUERTO RICO [1] REUNION [2] SAMOA [1] SOUTH AFRICA [1] TONGA [21] UNITED STATES

Red List assessed species 6: CR = 1; VU = 1; LR/nt = 1; LR/lc = 3;

Sarracenia alata LR/nt
Sarracenia leucophylla VU
Sarracenia oreophila CR
Sarracenia oreophila CR
Sarracenia oreophila CR
Sarracenia psittacina LR/lc

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