

# NSW Weed Risk Management assessment: *Ligustrum sinense*

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		<i>Ligustrum sinense</i>		
		Narrow-leaf privet/Chinese		
		Oleaceae		
		NSW		
	Area considered:	Nature conservation		
	Landuse:	Low density in landuse		
	Density:	Standard weed management - little aside from site treatment with herbicides, fire and labour-intensive tools.		
Invasiveness			Do not know	
Q1	score	2	0.0	Burrows and Kohen (1983) - not as clear cut as for <i>L. lucidum</i> .
Q2	score	3	0.0	Little general management in landuse aside from fire which the species has some tolerance to.
Q3	a	0	0.0	Johnson (2008).
	b	2	0.0	Westoby <i>et al.</i> (1983) 1300 fruit/sq. m canopy average.
	c	2	0.0	Frequent e.g. Westoby <i>et al.</i> (1983).
	total	4		
Q3	score	2		
Q4	a	2	0.0	Johnson (2008).
	b	1	0.0	Johnson (2008) not specified in literature.
	c	1	0.0	Muyt (2001).
	d	0	0.0	Johnson (2008) not specified in literature.
	total	4		
Q4	score	2		
Q5	a	1	0.0	Intentional human plantings now planted rarely - species out of vogue.
	b	0	0.0	Johnson (2008) not specified in literature.
	c	0	0.0	Johnson (2008) not specified in literature.
	d	0	0.0	Johnson (2008) not specified in literature.
	total	1		
Q5	score	1		
<b>Invasiveness score</b>		<b>10</b>		
Impacts				
Q1	score	3	0.0	Swarbrick <i>et al.</i> (1999).
Q2	score	4	0.0	Swarbrick <i>et al.</i> (1999).
Q3	score	2	0.0	e.g. Coutts-Smith and Downey (2006), Johnson (2008) - areas invaded are never not suitable for conservation once rehabilitated.
Q4	score	2	0.0	Johnson (2008) not specified in literature.
Q5	score	1	0.0	As summarised in Johnson (2008).
Q6	a	0	0.0	As summarised in Johnson (2008) not major +ve or -ve.

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	<i>b</i>	1	0.0	Fox and Adamson (1986), Swarbrick <i>et al.</i> (1999).
	<i>c</i>	0	0.0	As summarised in Johnson (2008) not major +ve or -ve.
	<i>d</i>	0	0.0	As summarised in Johnson (2008) not major +ve or -ve.
	<i>e</i>	0	0.0	As summarised in Johnson (2008) not major +ve or -ve.
	<i>f</i>	0	0.0	As summarised in Johnson (2008) not major +ve or -ve.
	<i>total</i>	1		
<b>Q6</b>	<b>score</b>	<b>1</b>		
	<b>Impacts score</b>	<b>13</b>		
	<b>Potential distribution score</b>	<b>0.5</b>	<b>0.0</b>	Estimate of less than 5% of area.
Comparative weed risk and Uncertainty scores				
	<b>Corrected Invasiveness</b>	<b>6.7</b>		
	<b>Corrected Impacts</b>	<b>6.8</b>		
	<b>Corrected Potential distribution</b>	<b>0.5</b>		
	<b>Comparative Weed Risk</b>	<b>23</b>		
		<b>Low</b>		
	Uncertainty Invasiveness	0.0		
	Uncertainty Impacts	0.0		
	Uncertainty Potential Distribution	0.0		
Control costs				
Q1	<i>a</i>	1	0.0	Johnson (2008) - not always distinct.
	<i>b</i>	0	0.0	Johnson (2008) - perennial.
	<i>c</i>	0	0.0	Hardin (1992).
	<i>d</i>	0	0.0	Hardin (1992) and pers. obs.
	<i>total</i>	1		
<b>Q1</b>	<b>score</b>	<b>1</b>		
<b>Q2</b>	<b>score</b>	<b>1</b>	<b>0.0</b>	All sites likely to be readily accessible.
Q3	<i>a</i>	1	0.0	Low chemical cost with cut stump or stem injection applications.
	<i>b</i>	4	0.0	Assumed to be very high with range of hand removal or chemical techniques.
	<i>c</i>	1	0.0	Likely to be low equipment cost in general.
	<i>total</i>	6		
<b>Q3</b>	<b>score</b>	<b>3</b>		
<b>Q4</b>	<b>score</b>	<b>1</b>	<b>0.0</b>	Weed control not commonly undertaken in land use unless at specific sites.

*Ligustrum sinense* (cont.)

<b>Control costs score</b>		<b>6</b>		
Persistence				
Q1	score	1	0.0	Johnson (2008) most successful techniques have greater than 95% control.
Q2	score	0	0.0	Johnson (2008) far longer than 2 years.
Q3	score	0	0.0	Panetta (2000) - almost all gone inside 1 year.
Q4	a	2	0.0	Johnson (2008) - birds frequently disperse.
	b	0	0.0	Johnson (2008) - deliberate introduction is rare - very uncommonly planted now.
	total	2		
Q4	score	2	0.0	
<b>Persistence score</b>		<b>3</b>		
Current Distribution				
Q1	score	0.1	0.0	Far less than 1% of total biodiversity areas affected.
Q2	score	1	0.0	Mainly small infestations spread over much of the area.
<b>Current Distribution score</b>		<b>1.1</b>		
Comparative Feasibility of Coordinated Control and Uncertainty scores				
<b>Corrected Control costs</b>		<b>5.0</b>		
<b>Corrected Persistence</b>		<b>2.7</b>		
<b>Corrected Current distribution</b>		<b>0.9</b>		
<b>Comparative Feasibility of Coordinated Control</b>		<b>13</b>		
		<b>Very high</b>	but closer to High at 14-30	
Uncertainty Control costs		0.0		
Uncertainty Persistence		0.0		
Uncertainty Current distribution		0.0		
Overall Uncertainty score		0		
Positive impacts		Previously commonly planted as hedge, shade, shelter and garden trees and shrubs. Historic tree and hedge plantings may be still planted in urban areas.		
Further comments		None		

Determining priorities

Weed risk is LOW

## *Ligustrum sinense* (cont.)

Feasibility of Coordinated control is VERY HIGH but closer to HIGH

On the Management action matrix the weed falls into 'Monitor Protect Priority Sites in the upper right of the matrix

Suggested Management actions of 'Monitor' and 'Protect Priority sites'

### **Aims to detect any significant changes in the species' weed risk**

Monitor the spread of the species and review any perceived changes in weediness.

### **Aims to prevent the spread of the weed species to key sites/assets of high economic, environmental and/or social value**

Weed may be of limited current distribution but only threatens limited industries/habitats (lower weed risk), or the weed may be more widespread but is yet to invade/impact upon many key industries/habitats (higher weed risk).

Surveillance and mapping to locate all infested areas.

Identification of key sites/assets in the geographic area.

Control of infestations in close proximity to key sites/assets, aiming for a significant reduction in weed density.

Limits on movement and sale of species within geographic area.

Must not allow to spread from cultivated plants (if grown) in close proximity to key sites/assets.

Monitor change in current distribution within and in close proximity to key site/assets.

### **References**

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