

NSW Weed Risk Management assessment: *Cylindropuntia rosea*

(Return to: <http://www.dpi.nsw.gov.au/agriculture/pests-weeds/weeds/wrm-system>)

		<i>Cylindropuntia rosea</i>		
		Hudson pear		
		Cactaceae		
	Area considered:	North Western Plains NSW		
	Land use:	Grazing modified pastures (dryland agriculture)		
	Density:	Medium density in land use		
		Standard weed management is limited. Varying stocking rates most common. Fire may be used in some instances. Very little use made of broad scale herbicide application. Arable land is cultivated but infestation are generally yet not found on this land use type. Some use may be made of large clearing machinery to clear woody regrowth (where permitted under relevant legislation). Note: this is the routine management used rather than any management directed at the species.		
	Invasiveness		Do not know	
Q1	score	1.5	1.5	'Do not know' - more research is needed.
Q2	score	1	0.0	Pers. obs.
Q3	a	0	0.0	Johnson <i>et al.</i> (2009).
	b	0	0.0	Johnson <i>et al.</i> (2009).
	c	2	0.0	Johnson <i>et al.</i> (2009).
	total	2		
Q3	score	1		
Q4	a	0	0.0	Johnson <i>et al.</i> (2009).
	b	2	0.0	Johnson <i>et al.</i> (2009).
	c	2	0.0	Johnson <i>et al.</i> (2009).
	d	0	0.0	Johnson <i>et al.</i> (2009).
	total	4		
Q4	score	2		
Q5	a	1	0.0	Johnson <i>et al.</i> (2009).
	b	2	0.0	Johnson <i>et al.</i> (2009).
	c	0	0.0	Johnson <i>et al.</i> (2009).
	d	2	0.0	Johnson <i>et al.</i> (2009).
	total	5		
Q5	score	2		
	Invasiveness score	7.5		
	Impacts			
Q1	score	0	0.0	Pers. obs.

Cylindropuntia rosea (cont.)

Q2	score	2	2.0	Do not know
Q3	score	1	0.0	Johnson <i>et al.</i> (2009)
Q4	score	2	0.0	Johnson <i>et al.</i> (2009)
Q5	score	2	0.0	Johnson <i>et al.</i> (2009)
Q6	a	0	0.0	Johnson <i>et al.</i> (2009)
	b	0.5	0.5	Do not know
	c	0.5	0.5	Do not know
	d	0	0.0	Pers. obs.
	e	0	0.0	Pers. obs.
	f	0	0.0	Pers. obs.
	total	1		
Q6	score	1		
	Impacts score	8		
	Potential distribution			
	score	6	0.0	Estimate.
	Comparative weed risk and Uncertainty scores			
	Corrected Invasiveness	5.0		
	Corrected Impacts	4.2		
	Corrected Potential distribution	6.0		
	Comparative Weed Risk	126		
		High		
	Uncertainty Invasiveness	10.7		
	Uncertainty Impacts	27.3		
	Uncertainty Potential Distribution	0.0		
	Control costs			
Q1	a	1	0.0	Johnson <i>et al.</i> (2009)
	b	0	0.0	Johnson <i>et al.</i> (2009)
	c	1	0.0	Johnson <i>et al.</i> (2009)
	d	1	0.0	Johnson <i>et al.</i> (2009)
	total	3		
Q1	score	2		
Q2	score	1	0.0	Pers. obs.
Q3	a	3	0.0	Pers. obs.

Cylindropuntia rosea (cont.)

	<i>b</i>	2	0.0	Pers. obs.
	<i>c</i>	1	0.0	Pers. obs.
	<i>total</i>	6		
Q3	score	3		
Q4	score	2	0.0	Pers. obs.
Control costs score		8		
Persistence				
Q1	score	3	0.0	Johnson <i>et al.</i> (2009).
Q2	score	3	0.0	Pers. obs.
Q3	score	0	0.0	Pers. obs.
Q4	<i>a</i>	1	0.0	Johnson <i>et al.</i> (2009).
	<i>b</i>	1	0.0	Johnson <i>et al.</i> (2009).
	<i>total</i>	2		
Q4	score	2	0.0	
Persistence score		8		
Current Distribution				
Q1	score	0.1	0.0	Johnson <i>et al.</i> (2009).
Q2	score	1	0.0	Johnson <i>et al.</i> (2009).
Current Distribution score		1.1		
Comparative Feasibility of Coordinated Control and Uncertainty scores				
Corrected Control costs		6.7		
Corrected Persistence		7.3		
Corrected Current distribution		0.9		
Comparative Feasibility of Coordinated Control		44		
		Medium		
Uncertainty Control costs		0.0		
Uncertainty Persistence		0.0		
Uncertainty Current distribution		0.0		
Overall Uncertainty score		6		
Positive impacts		Previously used as a nursery plant and animal deterrent - Lightning Ridge Miners Association		

Cylindropuntia rosea (cont.)

Comments	None		
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Determining priorities

Weed risk is HIGH

Feasibility of Coordinated control is MEDIUM

On the Management action matrix the weed falls into 'Protect priority sites' in the lower middle of the matrix.

Suggested Management actions of 'Protect priority sites'

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 sites/assets.

Reference

Johnson, S. B., Hosking, J. R., Chinnock, R. J. and Holtkamp, R. H. (2009). The biology of Australian weeds *Cylindropuntia rosea* (DC.) Backeb. and *Cylindropuntia tunicata* (Lehm.) F.M.Knuth (Cactaceae). *Plant Protection Quarterly*, **24**, 42-49.