

Weed (Scientific name)	Sorghum x alnum, Sorghum bicolor subsp. alnum - Poaceae		
Region	Sydney		
Management Area	Sydney		
Landuse	1. CONSERVATION AND NATURAL ENVIRONMENTS		
Assumptions			
<i>Invasiveness</i>	Score	Total	
Q1. What is the ability of the weed to establish amongst existing plants?		2.0	Seedlings establish within open vegetation or weeds Q1
Q2. What is the weed's tolerance to average weed management practices in the land use?		3.0	95% + weeds survive common management Q2
Q3. What is the reproductive ability of the weed in the land use?		3.0	
(a) Time to seeding	?		Do not know Q3
(b) Annual seed production	2.0		High
(c) Vegetative reproduction	2.0		Frequent
Q4. How likely is long-distance dispersal (>100m) by natural means?		2.0	
(a) Flying animals	0.0		Unlikely Q4
(b) Other wild animals	0.0		Unlikely
(c) Water	2.0		Common
(d) Wind	?		Do not know
Q5. How likely is long-distance dispersal (>100 m) by human means?		3.0	
(a) Deliberate spread by people	1.0		Occasional Q5
(b) Accidentally by people and vehicles	2.0		Common
(c) Contaminated produce	2.0		Common
(d) Domestic/farm animals	2.0		Common
Total		8.7	

Impacts	Score	Total	
Q1. Does the weed reduce the establishment of desired plants?		3.0	> 50% reduction Q1
Q2. Does the weed reduce the yield or amount of desired vegetation?		2.0	10 - 25% reduction Q2
Q3. Does the weed reduce the quality of products, diversity or services available from the land use?		1.0	Low Q3
Q4. What is the weed's potential to restrict the physical movement of people, animals, vehicles, machinery and/or water?		1.0	Low Q4
Q5. What is the weed's potential to negatively affect the health of animals and/or people?		0.0	None Q5
Q6. Does the weed have major positive or negative effects on environmental health?		1.0	
(a) food/shelter	0.0		Minor or no effect Q6
(b) fire regime	1.0		Major negative effect
(c) altered nutrient levels	0.0		Minor or no effect
(d) soil salinity	0.0		Minor or no effect
(e) soil stability	0.0		Minor or no effect
(f) soil water table	0.0		Minor or no effect
Total		4.2	
Potential Distribution			
Q1. Within the geographic area being considered, what is the percentage area of land use that is suitable for the weed?		1.0	5-10% of land use Q1
Comparative weed risk score		36	
Weed risk category		Low	

Control Costs		Score	Total	
Q1. How detectable is the weed?			1	Q1
(a) Distinguishing features	0			
(b) Period of year shoot growth visible	0			
(c) Height at maturity	0			
(d) Pre-reproductive height in relation to other vegetation	1			
Q2. What is the general accessibility of known infestations at the optimum time of treatment?			0	Q2
Q3. How expensive is management of the weed in the first year of targeted control?			2	Q3
(a) Chemical costs/ha	2			
(b) Labour costs/ha	1			
(c) Equipment costs	1			
Q4. What is the likely level of participation from landholders/volunteers within the land use at risk?			2.0	Q4
Total			4.2	
Persistence		Score	Total	
Q1. How effective are targeted management treatments applied to infestations of the weed?			3	Q1
Q2. What is the minimum time period for reproduction of sexual or vegetative propagules?			?	Q2
Q3. What is the maximum longevity of sexual or vegetative propagules?			2	Q3
Q4. How likely are new propagules to continue to arrive at control sites, or to start new infestations?			3.0	Q4
(a) Long-distance (>100m) dispersal by natural means	2			
(b) Long-distance (>100m) dispersal by human means	2			
Total			8.6	
Current distribution				
Q1. What percentage area of the land use in the geographical area is currently infested by the weed?			0.1	Q1
Q2. What is the number of infestations, and weed distribution within the geographic area being considered?			1.0	Q2
Total			0.9	
Comparative feasibility of coordinated control score			33	
Feasibility of coordinated control category			Medium	

<p style="text-align: center;">Management priority category</p> <p style="text-align: center;">Calculation of overall uncertainty score</p> <p style="text-align: center;">Response</p>	<p>Limited Action</p> <p>7%</p> <p>Submit Assessment</p>
<p style="text-align: center;">Positive Impacts</p>	
<p>References/Other comments</p>	

Re: Sources: Many of the questions above answered as a group by: J Vollmer & S Granger - Sydney North WC, D Walker & K Harper Sydney Central WC, and N Booth & D Simmons Sy

Source and comments

Corn competition reduces, but does not eradicate emergence.
<http://www.jstor.org/pss/3987340>

see below

<http://www.jstor.org/pss/3987340>
http://www.wagga.nsw.gov.au/resources/documents/Class_4_Weed_Management_Plan1.pdf

<http://www.southeastweeds.org.au/index.pl?page=130>

Cultivated as a forage plant. Richardson, Richardson & Shepherd
<http://www.southeastweeds.org.au/index.pl?page=130>

<http://www.jstor.org/pss/3987340>

Requires repeated deep cultivation to exhaust rhizomes,

http://www.wagga.nsw.gov.au/resources/documents/Class_4_Weed_Management_Plan1.pdf, so has potential to positively affect soil stability. Large size of grass can influence fire regimes.

http://cms.jcu.edu.au/discovernature/weedscommon/JCUPRD_039032 Perennial. Difficult to distinguish from Johnson Grass. <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Sorghum-almum>

In field studies, viability of seeds placed on the soil surface or buried 3 or 8 cm was 2% or less at 12 months and 0% at 18 months after burial. Viability of seeds buried 15 and 23 cm was 0.3 and 26%, respectively, at 24 months after burial. Thus, tillage that buried sorghum-

<http://www.southeastweeds.org.au/index.pl?page=130>

dney West/Blue Mountains WC, with the assistance of Sue Stevens.