

MN NWAC Risk Assessment Worksheet (04-2011)	Common Name	Latin Name
	Iberian Starthistle	<i>Centaurea iberica</i> Trevir. ex Spreng
Reviewer	Affiliation/Organization	Date (mm/dd/yyyy)
Monika Chandler	Minn Dept of Ag	08/03/15

Box	Question	Answer	Outcome
1	Is the plant species or genotype non-native?	Yes. It is native to southern Europe and the Middle East and is biennial to perennial (Winston and Schwarzlander 2010). This reviewer did not find a delineation of the native range.	Go to Box 3
3	Is the plant species, or a related species, documented as being a problem elsewhere?	Yes. Iberian starthistle is regulated in Arizona, California, Nevada and Oregon (USDA, NRCS 2015). It is a county declared noxious weed in Big Horn, Converse and Washkie Counties in Wyoming (Wyoming Weed and Pest Council 2015). This is a target species of the San Francisco Bay Area Early Detection Network (Frey et al 2015). This species is problematic in mountain grasslands in Kashmir Himalaya, India (Reshi et al 2008).	Go to Box 6
6	Does the plant species have the capacity to establish and survive in Minnesota?		
	A. Is the plant, or a close relative, currently established in Minnesota?	No. Some <i>Centaurea</i> species are established in Minnesota.	Go to Question B
	B. Has the plant become established in areas having a climate and growing conditions similar to those found in Minnesota?	Most of the infestations appear to be in California but this species is also documented in Kansas, Oregon, Washington and Wyoming (USDA, NRCS 2015). It is not documented in areas as cold as Minnesota and it is unknown if this species could establish in Minnesota.	If this species is not cold hardy for MN, it is not a risk <b>Do not list at this time</b>
7	Does the plant species have the potential to reproduce and spread in Minnesota?		
	A. Does the plant reproduce by asexual/vegetative means?	No	Go to Question C

Box	Question	Answer	Outcome
	C. Does the plant produce large amounts of viable, cold-hardy seeds?	Yes, there is prolific seed production (Graham and Johnson 2003) but the cold hardiness is not known.	Go to Question F if seed is hardy Go to Question D if seed is not hardy
	D. If this species produces low numbers of viable seeds, does it have a high level of seed/seedling vigor or do the seeds remain viable for an extended period?	High numbers of seed are likely produced although definitive information was not found. Information on seed persistence in the seedbank was not found. Based upon other <i>Centaurea</i> , seedbank persistence is likely to be approximately 3-10 years.	Go to Question E
	E. Is this species self-fertile?	Information on the self-fertility of this species was not found. A related species, spotted knapweed ( <i>C. stoebe</i> ssp. <i>micranthos</i> ) is self-fertile (CDFA Encycloweededia)	Go to Question F
	F. Are sexual propagules – viable seeds – effectively dispersed to new areas?	Yes, seed can be moved with equipment, hay and livestock (Graham and Johnson 2003). Seed is also likely dispersed by wind, water and wildlife.	Go to Question I
	I. Do natural controls exist, species native to Minnesota, that are documented to effectively prevent the spread of the plant in question?	No	Go to Box 8
8	Does the plant species pose significant human or livestock concerns or has the potential to significantly harm agricultural production, native ecosystems, or managed landscapes?		
	A. Does the plant have toxic qualities, or other detrimental qualities, that pose a significant risk to livestock, wildlife, or people?	No	Go to Question B
	B. Does, or could, the plant cause significant financial losses associated with decreased yields, reduced crop quality, or increased production costs?	Yes, if the species is cold hardy in Minnesota. This species is not safe for animal feed, hinders the movement of domestic and wild animals and is outcompeting forage (Graham and Johnson 2003).	Go to Box 9
	C. Can the plant aggressively displace native species through competition (including allelopathic effects)?	This species is aggressively displacing native species (Graham and Johnson 2003).	Go to Box 9

Box	Question	Answer	Outcome
9	Does the plant species have clearly defined benefits that outweigh associated negative impacts?		
	A. Is the plant currently being used or produced and/or sold in Minnesota or native to Minnesota?	No	Go to Box 10
10	Should the plant species be enforced as a noxious weed to prevent introduction &/or dispersal; designate as prohibited or restricted?	Based upon available information, we cannot reliably predict whether this species will be problematic in Minnesota. This species should not be listed at this time.	
	A. Is the plant currently established in Minnesota?	No	
	B. Does the plant pose a serious human health threat?	No	
	C. Can the plant be reliably eradicated (entire plant) or controlled (top growth only to prevent pollen dispersal and seed production as appropriate) on a statewide basis using existing practices and available resources?	Yes	
<b>Final Results of Risk Assessment</b>			
	<b>Review Entity</b>	<b>Comments</b>	<b>Outcome</b>
	NWAC Listing Subcommittee	It is unknown whether Iberian starthistle could establish in Minnesota. If this species establishes in a state or province with similar climate, this risk assessment should be revisited.	08/04/15 – Do not list
	NWAC Full-group	Voted 11 in favor and 0 opposed.	NO REGULATORY ACTION. DO NOT LIST.
	MDA Commissioner		
	FILE#: <b>IberianStarthistle_2015_MDARA00049IST</b>		

**References:**

California Department of Food and Agriculture

Encycloweedia [www.cdfa.ca.gov/plant/ipc/encycloweedia/weedinfo/centaurea.htm#anchor337900](http://www.cdfa.ca.gov/plant/ipc/encycloweedia/weedinfo/centaurea.htm#anchor337900), 3 August 2015.

Frey, M., M. Perlmutter, A. Williams and D. Gluesenkamp. 2015. *In Press* The San Francisco Bay Area Early Detection Network.

Management of Biological Invasions

Graham, J. and W. Johnson. 2003. Managing purple and Iberian starthistles. University of Nevada Cooperative Extension Fact Sheet 03-46.

Reshi, Z, I. Rashid, A. A.A. Khuroo and B.A Wafi. 2008. Effect of invasion by *Centaurea iberica* on community assembly of a mountain grassland of Kashmir Himalaya, India. *Tropical Ecology* 49(2): 147-156.

USDA, NRCS. 2015. The PLANTS Database (<http://plants.usda.gov>, 3 August 2015). National Plant Data Team, Greensboro, NC 27401-4901 USA.

Winston, R. and M. Schwarzlander. 2010. New Invaders of the Northwest Guidebook. USDA Forest Service Forest Health Technology

Enterprise Team. [www.fs.fed.us/foresthealth/technology/pdfs/NewInvadersOfTheNorthwest.pdf](http://www.fs.fed.us/foresthealth/technology/pdfs/NewInvadersOfTheNorthwest.pdf) , 3 August 2015.

Wyoming Weed and Pest Council [www.wyoweed.org/weeds/state-designated-weeds](http://www.wyoweed.org/weeds/state-designated-weeds), 3 August 2015.