

<i>Thysanolaena latifolia</i> (<i>Melica latifolia</i>, <i>Agrostis maxima</i>, <i>T. maxima</i>)-Tiger grass		Answer	Score
1.01	Is the species highly domesticated?	n	0
1.02	Has the species become naturalised where grown?		
1.03	Does the species have weedy races?		
2.01	Species suited to US climates (USDA hardiness zones; 0-low, 1-intermediate, 2-high).	2	
2.02	Quality of climate match data (0-low; 1-intermediate; 2-high).	2	
2.03	Broad climate suitability (environmental versatility).	y	1
2.04	Native or naturalized with mean annual precipitation of 11-60 inches.		
2.05	Does the species have a history of repeated introductions outside its natural range?	y	
3.01	Naturalized beyond native range.	y	2
3.02	Garden/amenity/disturbance weed	n	0
3.03	Weed of agriculture	n	0
3.04	Environmental weed	n	0
3.05	Congeneric weed	n	0
4.01	Produces spines, thorns or burrs	n	0
4.02	Allelopathic	?	
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals	n	-1
4.05	Toxic to animals	n	0
4.06	Host for recognised pests and pathogens	y	1
4.07	Causes allergies or is otherwise toxic to humans.	?	
4.08	Creates a fire hazard in natural ecosystems	?	
4.09	Is a shade tolerant plant at some stage of its life cycle	y	1
4.10	Grows on any soil order representing >5% cover in the US.	y	1
4.11	Climbing or smothering growth habit		
4.12	Forms dense thickets	n	0
5.01	Aquatic	n	0
5.02	Grass	y	1
5.03	Nitrogen fixing woody plant	n	0
5.04	Geophyte	n	0
6.01	Evidence of substantial reproductive failure in native habitat	n	0
6.02	Produces viable seed	y	1
6.03	Hybridizes naturally		
6.04	Self-compatible or apomictic		
6.05	Requires specialist pollinators		
6.06	Reproduction by vegetative propagation		
6.07	Minimum generative time (years)	1	1
7.01	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)		
7.02	Propagules dispersed intentionally by people	y	1
7.03	Propagules likely to disperse as a produce contaminant	?	
7.04	Propagules adapted to wind dispersal	y	1
7.05	Propagules water dispersed	y	1
7.06	Propagules bird dispersed	?	
7.07	Propagules dispersed by other animals (externally)	?	
7.08	Propagules dispersed by other animals (internally)	?	
8.01	Prolific seed production		
8.02	Evidence that a persistent propagule bank is formed (>1 yr)		

8.03	Well controlled by herbicides		
8.04	Tolerates, or benefits from, mutilation or cultivation		
8.05	Effective natural enemies present in the contiguous US and Alaska		
	Total Score		11
	Implemented Pacific Second Screening		No
	Risk Assessment Results		High Risk

	Reference	Source data
1.01		No Evidence
1.02		
1.03		
2.01	1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/taxgenform.pl?language=en (25 Nov 2013). 2. PERAL NAPPFAST Global Plant Hardiness (http://www.nappfast.org/Plant_hardiness/NAPPFAST%20Global%20zones/10-year%20climate/PLANT_HARDINESS_10YR%20lgnd.tif). 3. Clayton et al. (2006) Grassbase-the online world grass Flora. http://www.kew.org/data/grasses_db.html (accessed 25 Nov 2013). 4. Dave's Garden. http://davesgarden.com/guides/pf/go/139650/ (accessed 25 nov 2013).	No computer analysis performed. 1. Native to Asia-temperate and Asia-tropical climate. 2. Global Plant Hardiness zones 6-13. 3. Africa: west tropical, east tropical, and western Indian ocean, Asia temperate:China and eastern Asia, Asia tropical: India, Indo-China, Malesia, and Papuasias, Pacific: North-central. 4. USDA Zone 10a-11
2.02	Refer to all references in 2.01.	No computer analysis was performed. Native range is well known; refer to 2.01 source data.
2.03	1. Köppen-Geiger climate map (http://www.hydrol-earth-syst-sci.net/11/1633/2007/hess-11-1633-2007.pdf). 2. Encyclopedia of Life http://eol.org/pages/1115210/overview (25 Nov 2013). Distribution map.	No computer analysis was performed. Present in more than 3 climatic zones including Cfa, Csa, Csb, Cfa, Cfb, Af. Native range is well known; refer to 2.01 source data.
2.04		
2.05	1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/taxgenform.pl?language=en (25 Nov 2013). 2. The Grass Manual on the Web. Utah State University, Logan, Utah http://herbarium.usu.edu/webmanual/ (accessed 25 Nov 2013).	1. Cultivated. 2. Grown in the US as an ornamental plant
3.01	1. Holm, L. et al. (1979) A Geographical Atlas of World Weeds. John Wiley and Sons, New York. 2. Weed Watch bulletin TechnigroNerang, BC, QLD, Australia. 3. USDA Plants Database www.http://plants.usda.gov (accessed 25 Nove 2013). 4. Imada (2012) Hawaii native and Naturalized Vascular Plants Checklist. Hawaii Biological Survey, Bishop Museum, Honolulu, HI	1.Common weed in Vietnam. 2. Starting to spread from cultivation in Queensland and is now thought to be a potential environmental weed. 3. Present in California although the invasion status is unknown. 4. Present on island of O'ahu but status is listed as '?'.
3.02		No Evidence
3.03		No Evidence
3.04		No Evidence
3.05		No Evidence
4.01		No Evidence
4.02		No Evidence
4.03		No Evidence

4.04	1. Saikia et al. (1992) Paper from <i>Thysanolaena maxima</i> . BioresourceTech 40:245-248. 2. Sah & Palni (2008) Promotion and cultivation of <i>T. maxima</i> (Roxb.) Kuntze: a multiuse species in Uttarakhand. PNAS India sectionB 78:169-173. 3. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/taxgenform.pl?language=en (25 Nov 2013). 4. Manidool (1992) <i>Thysanolaena maxima</i> (Roxb. ex Hornem.) Honda [Internet] Record from Proseabase. Mmanneltje, L.and Jones RM (Eds.).PROSEA Foundation, Bogor, Indonesia. http.www.proseanet.org . 5. Rohilla and Bujarbaruah (2000) Effect of feeding broom grass (<i>t. maxima</i>) to rabbits. Indian J Animal Nutrition 17:87-89. 6. eFlora of India https://sites.google.com/site/efloraofindia/species (accessed 25 Nov 2013).	1. The leaves and tips are used as fodder. 2. a multiuse species of high fodder value, nutritious. 3. Animal food/forage. 4. used to feed cattle and buffalo. 5. Testing broom grass as forage for rabbits it was concluded that it can be fed to rabbits. 6. Since it is heavily browsed, it is naturally found on rocky slopes where herbivores cannot reach.
4.05	1. Food and Agriculture Organization of the United Nations (author Manneltje) www.fao.org (assessed 25 Nov 2013). 2. See source data 4.04	1. Toxicity: None reported. 2. See source data 4.04.
4.06	1. Bhilabutra et al. (2010) Fungi on the grasses, <i>Thysanolaena latifolia</i> and <i>Saccharum spontaneum</i> , in northern Thailand. Mycosphere 1: http://mycosphere.org/vol-1-issue4.php . 2. Wang et al. (2000). <i>Ommatomyces</i> , with one new species and one new combination. Fungal Divers 4:125-131. 3. Fetalvero (2012) Tiger Grass (<i>Thysanolaena Maxima</i>): Review of Its Biology and Uses. http://www.scribd.com/doc/105368991/Tiger-Grass-Thysanolaena-Maxima-Review-of-Its-Biology-and-Uses (accessed 5 Dec 2013) 4. Brunings et al. (2009) <i>Exserohilum</i> leaf spot on tiger grass. Plant Health Progress , Online. Plant Health Progress doi:10.1094/PHP-2009-1215-01-RS (accessed 6 Dec 2013).	1. conclusions indicate that several fungi have been found associated with <i>T. latifolia</i> and <i>S. spontaneum</i> and it has not been confirmed if these fungi are host specific. 2. The culms of <i>T. maxima</i> also serve as host to a new species of fungi, <i>Ommatomyces terrestris</i> and 3. a bacteria called <i>Xanthomonas axonopodis</i> pv. <i>vasculorum</i> 3.A leaf spot was observed and characterized morphologically and molecularly as <i>Exserohilum rostratum</i> . This newly discovered disease could potentially have a dramatic effect on the aesthetic quality and salability of <i>T. maxima</i> (<i>latifolia</i>) as a landscape ornamental.
4.07		No Evidence
4.08		No Evidence
4.09	1. Food and Agriculture Organization of the United Nations (author Manneltje) www.fao.org (assessed 25 Nov 2013). 2. Manidool (1992) <i>Thysanolaena maxima</i> (Roxb. ex Hornem.) Honda [Internet] Record from Proseabase. Mmanneltje, L.and Jones RM (Eds.).PROSEA Foundation, Bogor, Indonesia. http.www.proseanet.org . 3. Dave's Garden. http://davesgarden.com/guides/pf/go/139650/ (accessed 25 nov 2013).	1. In light shade seedlings grow slowly at first, but then are able to compete with other low growing plants. 2. Tiger grass grows on lightly shaded slopes. 3. Sun exposure listed as sun, oart sun/part shade, and light shade by Dave's Garden.
4.10	1. Lin et al. (2006) Nonconstituent species in soil seed banks as indicators of anthropogenic disturbance in forest fragments. Can J For Res 36:2300-2316. 2. Bhatt et al. (2010) Rehabilitation of shifting cultivation areas through agroforestry: a case study in eastern Himalaya, India. J Trop For Sci 22:13-20.	1. Listed on site in China characterized with the soil order Oxisols 2. Research conducted on site characterized as acidic Alfisols included <i>T. latifolia</i> and results indicated it was quite productive.
4.11		No Evidence
4.12	1. Manidool (1992) <i>Thysanolaena maxima</i> (Roxb. ex Hornem.) Honda [Internet] Record from Proseabase. Mmanneltje, L.and Jones RM (Eds.).PROSEA Foundation, Bogor, Indonesia. http.www.proseanet.org . 2. Weed Watch bulletin TechnigroNerang, BC, QLD, Australia.	1. Grows solitarily or in small clusters. 2. "It has yet to appear in dense stands..."
5.01		

5.02	1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/taxgenform.pl?language=en (25 Nov 2013). 2. Kew Seed Information Database http://data.kew.org/sid/sidsearch.html (25 Nov 2013)	Poaceae family
5.03		
5.04		
6.01		No Evidence
6.02	1. Kew Seed Information Database http://data.kew.org/sid/sidsearch.html (25 Nov 2013). 2. Bisht and Ahlawat Broom Grass. SFRI Information Bulletin No. 6. Itanagar, India. Accessed 25 Nov 2013.	1. 94% germination success. 2. regenerates through seeds under natural condition.
6.03		No Evidence
6.04		No Evidence
6.05		No Evidence
6.06	1. Food and Agriculture Organization of the United Nations (author Mannetje) www.fao.org (assessed 25 Nov 2013). 2. Bisht and Ahlawat Broom Grass. SFRI Information Bulletin No. 6. Itanagar, India. Accessed 25 Nov 2013.	1. Tiger grass can be propagated by rhizomes, rooted culms, or seeds. 2. Can be propagated by planting rhizomes
6.07	1. Clayton et al. (2006) Grassbase-the online world grass Flora. http://www.kew.org/data/grasses_db.html (accessed 25 Nov 2013). 2. Fetalvero (2012) Tiger Grass (<i>Thysanolaena Maxima</i>): Review of Its Biology and Uses. http://www.scribd.com/doc/105368991/Tiger-Grass-Thysanolaena-Maxima-Review-of-Its-Biology-and-Uses (accessed 5 Dec 2013).	1. Perennial 2. Seeds mature usually from February to March.
7.01	1. Weed Watch bulletin TechnigroNerang, BC, QLD, Australia.	1. They may also be dispersed by water, vehicles, mowing equipment and in contaminated soil.
7.02	1. The Grass Manual on the Web. Utah State University, Logan, Utah http://herbarium.usu.edu/webmanual/ (accessed 25 Nov 2013).	1. Planted as ornamental in the US.
7.03	1. Clayton et al. (2006) Grassbase-the online world grass Flora. http://www.kew.org/data/grasses_db.html (accessed 25 Nov 2013).	Caryopsis
7.04	1. Clayton et al. (2006) Grassbase-the online world grass Flora. http://www.kew.org/data/grasses_db.html (accessed 25 Nov 2013). 2. Bisht and Ahlawat Broom Grass. SFRI Information Bulletin No. 6. Itanagar, India. Accessed 25 Nov 2013. 3. Weed Watch bulletin TechnigroNerang, BC, QLD, Australia.	1. Caryopsis 2. Mature seeds disseminate by wind to long distances due to their light weight. 3. Because of their small and feathery nature, they are easily spread about by the wind.
7.05	1. Clayton et al. (2006) Grassbase-the online world grass Flora. http://www.kew.org/data/grasses_db.html (accessed 25 Nov 2013). 2. Bisht and Ahlawat Broom Grass. SFRI Information Bulletin No. 6. Itanagar, India. Accessed 25 Nov 2013. 3. Weed Watch bulletin TechnigroNerang, BC, QLD, Australia.	1. Caryopsis 2. Seed dispersal is also affected by water in some areas. 3. They may also be dispersed by water, vehicles, mowing equipment and in contaminated soil.
7.06		No Evidence
7.07	1. Lin et al. (2006) Nonconstituent species in soil seed banks as indicators of anthropogenic disturbance in forest fragments. <i>Can J For Res</i> 36:2300-2316.	1. Dispersal method listed as zoochory, but does not indicate if this is internal or external.
7.08	1. Lin et al. (2006) Nonconstituent species in soil seed banks as indicators of anthropogenic disturbance in forest fragments. <i>Can J For Res</i> 36:2300-2316.	1. Dispersal method listed as zoochory, but does not indicate if this is internal or external.
8.01		No Evidence

8.02	1. Chen et al. (2013) Soil seed banks in plantations and tropical seasonal rainforests of Xi Shuangbanna, southwest China. J Trop For Sci 25:375-386. 2. Lin et al. (2006) Nonconstituent species in soil seed banks as indicators of anthropogenic disturbance in forest fragments. Can J For Res 36:2300-2316.	1. Present in seed banks of rainforests, secondary forests, and various plantations in it's native range in SW China. No information provided about persistence. 2. Dominance of <i>T. maxima</i> (latifolia) in secondary grasslands in China explained by size of seed bank in former primary forests.
8.03		No Evidence
8.04		No Evidence
8.05		No Evidence