UF IFAS UNIVERSITY of FLORIDA

Assessment of Non-native Plants in Florida's Natural Areas

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Assessment date 21 April 2016

	Pueraria montana var. lobata **ALL ZONES**	**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 Florida's USDA climate zones (0-low; 1-intermediate; 2-high) North Zone: suited to Zones 8, 9 Central Zone: suited to Zones 9, 10 South Zone: suited to Zone 10	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 in habitats with periodic inundation North Zone: mean annual precipitation 50-70 inches Central Zone: mean annual precipitation 40-60 inches South Zone: mean annual precipitation 40-60 inches	y	1
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	y	2
3.03	Weed of agriculture	unk	
3.04	Environmental weed	y	4
3.05	Congeneric weed	y	2
4.01	Produces spines, thorns or burrs	n	0
4.02	Allelopathic	n	0
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	n	0
4.08	Creates a fire hazard in natural ecosystems	n	0
4.09	Is a shade tolerant plant at some stage of its life cycle	n	0
4.10	Grows on infertile soils (oligotrophic, limerock, or excessively draining soils). North & Central Zones: infertile soils; South Zone: shallow limerock or Histisols.	unk	0
4.11	Climbing or smothering growth habit	y	1
4.12	Forms dense thickets	y	1
5.01	Aquatic	n	0
5.02	Grass	n	0
5.03	Nitrogen fixing woody plant	n	0
5.04	Geophyte	y	1
6.01	Evidence of substantial reproductive failure in native habitat	n	0
6.02	Produces viable seed	y	1

6.03	Hybridizes naturally	unk	-1
6.04	Self-compatible or apomictic	unk	-1
6.05	Requires specialist pollinators	n	0
6.06	Reproduction by vegetative propagation	y	1
6.07	Minimum generative time (years)	>1	-1
7.01	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y	1
7.02	Propagules dispersed intentionally by people	y	1
7.03	Propagules likely to disperse as a produce contaminant	unk	-1
7.04	Propagules adapted to wind dispersal	y	1
7.05	Propagules water dispersed	y	1
7.06	Propagules bird dispersed	y	1
7.07	Propagules dispersed by other animals (externally)	y	1
7.08	Propagules dispersed by other animals (internally)	y	1
8.01	Prolific seed production	n	-1
8.02	Evidence that a persistent propagule bank is formed (>1 yr)	unk	-1
8.03	Well controlled by herbicides	y	-1
8.04	Tolerates, or benefits from, mutilation or cultivation	unk	-1
8.05		unk	1
	Total Score	**17**	
	Implemented Pacific Second Screening	**no**	
	Risk Assessment Results	**High**	

section	**# questions answered**	**satisfy minimum?**
A	10	yes
B	11	yes
C	17	yes
total	38	yes

	Reference	Source data
1.01		cultivated, but no evidence of selection for reduced weediness
1.02		
1.03		
2.01	1. PERAL NAPPFAST Global Plant Hardiness (http://www.nappfast.org/Plant_hardiness/NAPPFAST%20Global%20zones/10-year%20climate/PLANT_HARDINESS_10YR%20lgnd.tif). 2. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896 (2-5-2016).	No computer analysis was performed. 1. Global hardiness zone: 7, 8, 9, 10, 11, 12 ; equivalent to USDA Hardiness zones: 8a: to -12.2 °C (10 °F) USDA Zone 8b: to -9.4 °C (15 °F) USDA Zone USDA Zone 9a: to -6.6 °C (20 °F) USDA Zone 9b: to -3.8 °C (25 °F) USDA Zone 10a: to -1.1 °C (30 °F) USDA Zone 10b: to 1.7 °C (35 °F) USDA Zone 11a: to USDA Zone (40 °F) USDA Zone 11b: to (45 °F) USDA Zone 12a: to (50 °F) USDA Zone 12b: to (55 °F). . 2. Native to Asia-Temperate China: China Eastern Asia: Japan; Korea; Taiwan Russian Far East: Russian Federation - Primorye Asia-Tropical Indo-China: Thailand; Vietnam Malesia: Indonesia; Malaysia; Papua New Guinea; Philippines Pacific Southwestern Pacific: New Caledonia; Solomon Islands; Vanuatu
2.02		Global distribution well known
2.03	1. Köppen-Geiger climate map (http://www.hydrol-earth-syst-sci.net/11/1633/2007/hess-11-1633-2007.pdf). 2. GBIG http://www.gbif.org/species/2977647 (2-10-2016)	1. Distribution in the native/cultivated range occurs in Af, Am, Aw, Cfa, Cwa, Dfa, Dfb
2.04	1. Climate Charts. World Climate Maps. http://www.climate-charts.com/World-Climate-Maps.html#rain (8-19-2015)	1. Native to regions with annual rainfall of 28 in to 197 inches.
2.05	1. Csurhes, Steve. August 2008. Pest plant risk assessment Kudzu. Biosecurity Queensland Department of Primary Industries and Fisheries, https://www.daf.qld.gov.au/__data/assets/pdf_file/0004/74137/IPA-Kudzu-Risk-Assessment.pdf (2-3-2016) 2. National Park Servive. Kudzu Factsheet, 2010, http://www.nps.gov/plants/alien/pubs/midatlantic/pumol.htm (2-3-2015)	Kudzu was first introduced into the United States in 1876 and was promoted for erosion control, as a forage crop and as an ornamental plant. 2. Kudzu was introduced to the United States from Japan in 1876 at the Philadelphia Centennial Exposition, as an ornamental plant. In early 1900s, it was recognized and promoted as a forage crop and planted throughout the southeastern U.S. In the 1930s and 1940s, the Soil Conservation Service paid southern farmers to plant kudzu to reduce soil erosion on deforested lands, resulting in over 1 million acres being planted.
3.01	1. Csurhes, Steve. August 2008. Pest plant risk assessment Kudzu. Biosecurity Queensland Department of Primary Industries and Fisheries, https://www.daf.qld.gov.au/__data/assets/pdf_file/0004/74137/IPA-Kudzu-Risk-Assessment.pdf (2-3-2016) 2. Queensland Government http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Pueraria_montana_var._lobata.htm (9-3-2016)	1. kudzu has naturalised in the United States, South America, South Africa and New Zealand within the last 100 years. 2. Kudzu (Pueraria montana var. lobata) is scattered in the coastal districts of eastern Australia. It is naturalised in northern, central and south-eastern Queensland and in the coastal districts of northern and central New South Wales. It is also naturalised on Norfolk Island. Naturalised overseas in the USA, Mexico, Central America (i.e. Panama), eastern Europe (i.e. Ukraine), western and central Asia, southern Africa and on some Pacific islands (i.e. Hawaii, American Samoa, Western Samoa, French Polynesia and Tonga).
3.02	1. Weeds Gone Wild: Alien Plant Invaders of Natural Areas http://www.nps.gov/plants/alien/pubs/midatlantic/pumol.htm (Accessed 4/19/2016) 2. Washington State Noxious Weed Control Board http://www.nwcb.wa.gov/default.asp (accessed 4/19/2016) 3. Southeast Exotic Pest Plant Council http://www.se-eppc.org/manual/kudzu.html (accessed 4/19/2016)	1. Preferred habitats are open, sunny areas like forest edges, abandoned fields, roadsides and disturbed areas. 2. kudzu grows best in well-drained degraded or eroded land or in disturbed, sandy, deep loam soils in full sun. 3. Forest edges or disturbed areas, such as abandoned fields and roadsides, are preferred habitats.
3.03		no evidence

3.04	1. National Park Servive. Kudzu Factsheet, 2010, http://www.nps.gov/plants/alien/pubs/midatlantic/pumol.htm (2-3-2015) 2. Munger, Gregory T. 2002. Pueraria montana var. lobata. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2016, February 3]. 3. Queensland Government http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Pueraria_montana_var._lobata.htm (9-3-2016)	Its vigorous growth and large leaves smother and shade out native plants. It can kill trees through girdling and the extra weight of vines can lead to toppling during storms. Once established, kudzu plants grow rapidly, extending as much as 60 feet per season, about 1 foot per day. 2. Kudzu invasion can have severe negative impacts on native plant communities. Because of its rapid growth rate and habit of growing over objects in its path, kudzu can outcompete native plants and quickly dominate habitats where it becomes established. Kudzu infestations are typified by a continuous blanket of monospecific foliage resulting in large-scale alteration of biotic communities. Patches larger than 100 acres (40 ha) now exist in some areas of the South. Plant densities in mature stands may be 1-2 plants per square foot or tens of thousands of plants per acre. Spreading kudzu infestations can eliminate forest cover by enveloping trees along margins of wooded areas. Trees of any size may succumb to competition from arboreal kudzu vines, whose prodigious foliage reduces light availability within the canopy. Infested trees, especially shade-intolerant species such as native pines, are weakened from reduced carbon fixation. Additionally, the accumulation of several years' worth of vines draped within tree crowns provides enough downward tension that even large trees can be pulled to the ground. Once kudzu has gained access to the forest canopy, it is capable of spreading more quickly and aggressively throughout a contiguously forested area during subsequent growing seasons. Presence of Japanese honeysuckle and other arboreal vines can exacerbate kudzu invasiveness. Because kudzu climbs by twining, it can ascend and spread into a forest canopy faster and more extensively by utilizing smaller-diameter vines rather than having
3.05	1. Holm, LeRoy G. A Geographical Atlas of World Weeds. Malabar, FL: Krieger Pub., 1991. Print.	1. Pueraria phaseoloides is a princple weed in Malaysia
4.01	1. Queensland Government http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Pueraria_montana_var._lobata.htm (9-3-2016)	1. These features are not evident in the species description
4.02		Inconclusive evidence
4.03		no evidence
4.04	1. Munger, Gregory T. 2002. Pueraria montana var. lobata. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2016, February 3].	1. Kudzu has potential value as livestock forage [7,65]; however, it is easily overbrowsed, and its utility may not be sustainable [66]. Moreover, while it has been previously cultivated for livestock use and grazing can be an effective control measure
4.05		no evidence
4.06	1. Global Invasive Species Databse http://www.issg.org/database/species/ecology.asp?si=81 (2-3-2016)	Kudzu is a reservoir for soybean rust and Phytophthora species
4.07	1. Queensland Government http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Pueraria_montana_var._lobata.htm (9-3-2016)	No evidence fo allergy 1. Overseas it has been cultivated for its edible root.

4.08	1. Munger, Gregory T. 2002. Pueraria montana var. lobata. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2016, February 3].	1. Kudzu stems and foliage are likely to resist fire damage during the growing season because they typically maintain high water content. Even during drought when nearby plants may be susceptible to fire due to desiccation, kudzu's deep taproot allows the plant to maintain a relatively high water content
4.09	1. Csurhes, Steve. August 2008. Pest plant risk assessment Kudzu. Biosecurity Queensland Department of Primary Industries and Fisheries, https://www.daf.qld.gov.au/__data/assets/pdf_file/0004/74137/IPA-Kudzu-Risk-Assessment.pdf (2-3-2016)	1. While kudzu grows best under full sun it is one of the more shade-tolerant legumes…no evidence that it will persist in 90+% shade
4.10	1. USDA Global Soil Map http://www.nrcs.usda.gov/Internet/FSE_MEDIA/nrcs142p2_050722.jpg (2-10-2016)	1. Native soil regions of Kudzu overlap with all three soil zones of Florida, but there is insufficient evidence to posit that Kudzu is compatible with the soil in all the North, Central, and South Zones of Florida.
4.11	1. Munger, Gregory T. 2002. Pueraria montana var. lobata. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2016, February 3]. 2. Global Invasive Species Databse http://www.issg.org/database/species/ecology.asp?si=81 (2-3-2016) 3. Dr. K.V.Sankaran, APFISN Co-ordinator on behalf of the Asia-Pacific Forest Invasive Species Network November 2006 http://www.fao.org/forestry/11635-0cf1d95982e4ba94073cfdecb3b3f1e25.pdf (2-10-2016)	1. Vines climb by twining the stem around a support such as the bole of a tree 2. Kudzu is widely believed to drastically reduce biodiversity because of its ability to smother other vegetation and develop large-scale monocultures 3. Kudzu (Pueraria montana var. lobata), a native of Asia, is a climbing, woody or semi-woody, aggressive perennial vine (Fabaceae) capable of reaching heights of 20-30 m in trees.
4.12	1. Mississippi State University Invasive Plant Atlas of the Mid-South https://www.gri.msstate.edu/ipams/species.php?CName=Kudzu (2-3-2016) 2. Dr. K.V.Sankaran, APFISN Co-ordinator on behalf of the Asia-Pacific Forest Invasive Species Network November 2006 http://www.fao.org/forestry/11635-0cf1d95982e4ba94073cfdecb3b3f1e25.pdf (2-10-2016)	1. Kudzu thickets can be difficult for humans and certain animals to navigate. 2. Dense thickets of the weed obstruct all views and movement in the affected area.
5.01		Family: Fabaceae
5.02		Family: Fabaceae
5.03	1. Munger, Gregory T. 2002. Pueraria montana var. lobata. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2016, February 3].	1. Kudzu is a herbaceous to semiwoody plant, not woody. It does fix nitrogen
5.04	1. Csurhes, Steve. August 2008. Pest plant risk assessment Kudzu. Biosecurity Queensland Department of Primary Industries and Fisheries, https://www.daf.qld.gov.au/__data/assets/pdf_file/0004/74137/IPA-Kudzu-Risk-Assessment.pdf (2-3-2016)	1. Kudzu stores moisture within its roots and tubers and, as a result, can survive in seasonally dry areas 2. produces large underground tubers up to 1.8 m long and 15 cm wide
6.01		no evidence
6.02	1. Csurhes, Steve. August 2008. Pest plant risk assessment Kudzu. Biosecurity Queensland Department of Primary Industries and Fisheries, https://www.daf.qld.gov.au/__data/assets/pdf_file/0004/74137/IPA-Kudzu-Risk-Assessment.pdf (2-3-2016) 2. Munger, Gregory T. 2002. Pueraria montana var. lobata. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2016, February 3]. 3. PIER http://www.hear.org/pier/species/pueraria_montana_var_lobata.htm (2-3-2016)	1. Seeds can remain viable for several years 2. Generally, a cluster of seedpods produces only 1 or 2 viable seeds 3. Limited spread by seed.
6.03		inconclusive evidence
6.04		no evidence

6.05	1. Csurhes, Steve. August 2008. Pest plant risk assessment Kudzu. Biosecurity Queensland Department of Primary Industries and Fisheries, https://www.daf.qld.gov.au/__data/assets/pdf_file/0004/74137/IPA-Kudzu-Risk-Assessment.pdf (2-3-2016)	However, Thornton (2001) demonstrated that there are a variety of both native and naturalised pollinators in the United States
6.06	1. Csurhes, Steve. August 2008. Pest plant risk assessment Kudzu. Biosecurity Queensland Department of Primary Industries and Fisheries, https://www.daf.qld.gov.au/__data/assets/pdf_file/0004/74137/IPA-Kudzu-Risk-Assessment.pdf (2-3-2016) 2. National Park Servive. Kudzu Factsheet, 2010, http://www.nps.gov/plants/alien/pubs/midatlantic/pumol.htm (2-3-2015) 3. Munger, Gregory T. 2002. Pueraria montana var. lobata. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2016, February 3].	Kudzu can spread vegetatively. New roots are produced wherever the long, trailing stems touch the ground. 2. Spreads: expands locally by vegetative means through runners & rhizomes and by vines that root at the nodes to form new plants; may spread by seed in areas where a pollinator, the giant resin bee, occurs. 3. Kudzu commonly spreads by sending down roots from nearly every node along stems that contact soil. Rooting usually occurs every few feet along horizontal stems, and new root crowns develop at these nodes. New ramets develop the following spring, with new tendrils radiating in all directions from newly established root crowns
6.07	1. Csurhes, Steve. August 2008. Pest plant risk assessment Kudzu. Biosecurity Queensland Department of Primary Industries and Fisheries, https://www.daf.qld.gov.au/__data/assets/pdf_file/0004/74137/IPA-Kudzu-Risk-Assessment.pdf (2-3-2016) 2. Munger, Gregory T. 2002. Pueraria montana var. lobata. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2016, February 3].	1. Flowering occurs in summer and usually commences on plants that are at least three years old 2. Kudzu plants do not usually flower until their 3rd year
7.01	1. Csurhes, Steve. August 2008. Pest plant risk assessment Kudzu. Biosecurity Queensland Department of Primary Industries and Fisheries, https://www.daf.qld.gov.au/__data/assets/pdf_file/0004/74137/IPA-Kudzu-Risk-Assessment.pdf (2-3-2016) 2. Munger, Gregory T. 2002. Pueraria montana var. lobata. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2016, February 3]. 3. Queensland Government http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Pueraria_montana_var._lobata.htm (9-3-2016)	1. It is an opportunistic plant that is quick to colonise and dominate forest edges, abandoned fields and roadsides 2. Kudzu is typically found in open, disturbed areas such as abandoned fields, roadsides, and forest edges 3. The seeds can be dispersed in water and contaminated soil, while the stem segments and rhizomes can be spread in dumped garden waste and contaminated soil.
7.02	1. National Park Servive. Kudzu Factsheet, 2010, http://www.nps.gov/plants/alien/pubs/midatlantic/pumol.htm (2-3-2015)	1. Kudzu has been transported and planted by people for use a stock fodder, as a herb and as a garden ornamental. 2. Kudzu is dispersed by wind, animals, human activity, and water.
7.03		no evidence
7.04	1. Mississippi State University Invasive Plant Atlas of the Mid-South https://www.gri.msstate.edu/ipams/species.php?CName=Kudzu (2-3-2016)	2. Kudzu is dispersed by wind, animals, human activity, and water.
7.05	1. Queensland Government http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Pueraria_montana_var._lobata.htm (9-3-2016) 2. Mississippi State University Invasive Plant Atlas of the Mid-South https://www.gri.msstate.edu/ipams/species.php?CName=Kudzu (2-3-2016)	1. The seeds can be dispersed in water and contaminated soil, while the stem segments and rhizomes can be spread in dumped garden waste and contaminated soil. Kudzu is dispersed by wind, animals, human activity, and water. 2. Water currents: Kudzu seeds are dispersed by water from overhanging vine infestations

7.06	1. PIER http://www.hear.org/pier/species/pueraria_montana_var_lobata.htm (2-3-2016) 2. Mississippi State University Invasive Plant Atlas of the Mid-South https://www.gri.msstate.edu/ipams/species.php?CName=Kudzu (2-3-2016) 3. Global Invasive Species Databse http://www.issg.org/database/species/ecology.asp?si=81 (2-3-2016)	1. Seeds are dispersed by birds and mammals 2. Kudzu is dispersed by wind, animals, human activity, and water. 3. Consumption/excretion: Kudzu spreads over moderate distances by dispersal of seeds by mammals and birds.
7.07	1. Csurhes, Steve. August 2008. Pest plant risk assessment Kudzu. Biosecurity Queensland Department of Primary Industries and Fisheries, https://www.daf.qld.gov.au/__data/assets/pdf_file/0004/74137/IPA-Kudzu-Risk-Assessment.pdf (2-3-2016) 2. Mississippi State University Invasive Plant Atlas of the Mid-South https://www.gri.msstate.edu/ipams/species.php?CName=Kudzu (2-3-2016)	1. The seed-pods are quite sticky (hairy) and might adhere to clothing or the fur of animals 2. Kudzu is dispersed by wind, animals, human activity, and water.
7.08	1. PIER http://www.hear.org/pier/species/pueraria_montana_var_lobata.htm (2-3-2016) 2. Mississippi State University Invasive Plant Atlas of the Mid-South https://www.gri.msstate.edu/ipams/species.php?CName=Kudzu (2-3-2016) 3. Global Invasive Species Databse http://www.issg.org/database/species/ecology.asp?si=81 (2-3-2016)	1. Seeds are dispersed by birds and mammals 2. Kudzu is dispersed by wind, animals, human activity, and water. 3. Consumption/excretion: Kudzu spreads over moderate distances by dispersal of seeds by mammals and birds.
8.01	Munger, Gregory T. 2002. Pueraria montana var. lobata. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2016, February 3].	Kudzu plants do not usually flower until their 3rd year [3]. Kudzu rarely flowers on prostrate vines and seeds are only produced on climbing vines [11,33,39]. Generally, a cluster of seedpods produces only 1 or 2 viable seeds [11]. Seed production is substantially limited in North America, especially in areas outside the Southeast
8.02	1. Munger, Gregory T. 2002. Pueraria montana var. lobata. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2016, February 3]. 2. Fiye, M. J., J. Hough-Goldstein, and K. A. Kidd. 2012. Response of kudzu (Pueraria montana var. lobata) seedlings and naturalized plants to simulated herbivory. Invasive Plant Sci. Manag. 5:417–426.	1. Although information on seed longevity is lacking, seed banks can apparently develop 2. If kudzu patches in full sun are cleared, practitioners should implement additional management techniques such as revegetation to limit the recruitment of new kudzu plants from the seed bank.
8.03	1. Csurhes, Steve. August 2008. Pest plant risk assessment Kudzu. Biosecurity Queensland Department of Primary Industries and Fisheries, https://www.daf.qld.gov.au/__data/assets/pdf_file/0004/74137/IPA-Kudzu-Risk-Assessment.pdf (2-3-2016) 2. Munger, Gregory T. 2002. Pueraria montana var. lobata. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2016, February 3].	Kudzu has been controlled in the United States using the following techniques: • Cut-stump application with Tordon DS (1:4 in water), with BS1000 surfactant at one millilitre per litre. • Foliar spray with Grazon at five millilitres per litre…. Large infestations in the United States have taken up to 10 years to bring under control 2. Where appropriate, herbicides may be the most effective means of eradicating kudzu, whether used alone or in combination with other methods.
8.04		
8.05	1. National Park Servive. Kudzu Factsheet, 2010, http://www.nps.gov/plants/alien/pubs/midatlantic/pumol.htm (2-3-2015)	1. The U.S. Department of Agriculture is investigating biological control agents for kudzu including the naturally occurring fungus Myrothecium verrucaria.