

Assessment of Non-native Plants in Florida's Natural Areas assessment.ifas.ufl.edu

Assessment date 22 March 2017

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	Lespedeza cuneata 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)	у	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	У	1
2.05	Does the species have a history of repeated introductions outside its natural range?	у	
3.01	Naturalized beyond native range	у	2
3.02	Garden/amenity/disturbance weed	n	0
3.03	Weed of agriculture	unk	
3.04	Environmental weed	у	4
3.05	Congeneric weed	у	2
4.01	Produces spines, thorns or burrs	unk	0
4.02	Allelopathic	у	1
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals	у	1
4.05	Toxic to animals	n	0
4.06	Host for recognised pests and pathogens	n	0
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	n	0
4.12	Forms dense thickets	у	1
5.01	Aquatic	n	0
5.02	Grass	n	0
5.03	Nitrogen fixing woody plant	у	1
5.04	Geophyte	n	0

6.01	Evidence of substantial reproductive failure in native habitat	n	0	
6.02	Produces viable seed	у	1	
6.03	Hybridizes naturally	у	1	
6.04	Self-compatible or apomictic	у	1	
6.05	Requires specialist pollinators	n	0	
6.06	Reproduction by vegetative propagation	n	-1	
6.07	Minimum generative time (years)	1	1	
7.01	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked	у		
	areas)		1	
7.02	Propagules dispersed intentionally by people	у	1	
7.03	Propagules likely to disperse as a produce contaminant	у	1	
7.04	Propagules adapted to wind dispersal	n	-1	
7.05	Propagules water dispersed	у	1	
7.06	Propagules bird dispersed	у	1	
7.07	Propagules dispersed by other animals (externally)	n	-1	
7.08	Propagules dispersed by other animals (internally)	у	1	
8.01	Prolific seed production	у	1	
8.02	Evidence that a persistent propagule bank is formed (>1 yr)	у	1	
8.03	Well controlled by herbicides	у	-1	
8.04	Tolerates, or benefits from, mutilation or cultivation	у	1	
8.05		?		
	Total Score	2	3	
	Implemented Pacific Second Screening	n	0	
	Risk Assessment Results		High	

section		satisfy
	# questions answered	minimum?
Α		10 yes
В		10 yes
С		23 yes
total		43 yes

	Reference	Source data
1.01		Insufficient evidence of selection for reduced weediness
1.02		Skip to 2.01
1.03		Skip to 2.01
2.01	1. Global Plant Hardiness Zones for Phytosanitary Risk Analysis. http://naldc.nal.usda.gov/download/36586/PDF (Accessed: 13 January 2017) 2. US National Plant Germplasm System. https://npgsweb.ars-grin.gov/gringlobal/taxonomydetail.aspx?21856 (Accessed: 13 January 2017) 3. Invasive Plant Atlas of the United States. http://www.invasiveplantatlas.org/subject.html?sub=3033 (Accessed: 13 January 2017) 4. IUCN Red List. http://www.iucnredlist.org/details/19892702/0 (Accessed: 13 January 2017) 5. eNature. http://www.enature.com/fieldguides/detail.asp?recnum=TS1184 (Accessed: 13 January 2017)	1. Figure 3. Florida North Zone: Hardiness zones 8 and 9. Central Zone: Hardiness zones 9 and 10. South Zone: Hardiness zone 10. Native to USDA climate zones 6 through 12. 2. Native to China, Hong Kong, Japan, Korea, Taiwan, Bhutan, India, Nepal, Pakistan, Myanmar, Indonesia, Papua New Guinea, and Australia 3. "Native Range: China, Korea, Japan, Formosa, and Himalayas (REHD); China, Japan (BAIL)" 4. "Native: Afghanistan; Bhutan; China (Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning, Shaanxi, Shanxi, Sichuan, Xinjiang, Yunnan, Zhejiang); India; Indonesia; Japan; Korea, Democratic People's Republic of; Korea, Republic of; Lao People's Democratic Republic; Malaysia; Nepal; Pakistan; Papua New Guinea; Philippines; Taiwan, Province of China; Thailand; Viet Nam" 5. "Asia native; naturalized in the United States from Massachusetts to Florida and west to Wisconsin, Nebraska, and Texas."
2.02		Range is well known
2.03	1. The University of Melbourne. Köppen-Geiger Climate Map of the Wolrd. http://people.eng.unimelb.edu.au/mpeel/koppen.html (Accessed: 13 January 2017) 2. US National Plant Germplasm System. https://npgsweb.ars- grin.gov/gringlobal/taxonomydetail.aspx?21856 (Accessed: 13 January 2017) 3. Invasive Plant Atlas of the United States. http://www.invasiveplantatlas.org/subject.html?sub=3033 (Accessed: 13 January 2017) 4. IUCN Red List. http://www.iucnredlist.org/details/19892702/0 (Accessed: 13 January 2017) 5. eNature. http://www.enature.com/fieldguides/detail.asp?recnum=TS1 184 (Accessed: 13 January 2017)	1. Native or naturalized to Köppen-Geiger Climate Zones: Af, Am, Aw, BWh, BSh, Cwa, Cwb, Cfa, Cfb, and Dfa 2. Native to China, Hong Kong, Japan, Korea, Taiwan, Bhutan, India, Nepal, Pakistan, Myanmar, Indonesia, Papua New Guinea, and Australia 3. "Native Range: China, Korea, Japan, Formosa, and Himalayas (REHD); China, Japan (BAIL)" 4. "Native: Afghanistan; Bhutan; China (Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning, Shaanxi, Shanxi, Sichuan, Xinjiang, Yunnan, Zhejiang); India; Indonesia; Japan; Korea, Democratic People's Republic of; Korea, Republic of; Lao People's Democratic Republic; Malaysia; Nepal; Pakistan; Papua New Guinea; Philippines; Taiwan, Province of China; Thailand; Viet Nam" 5. "Asia native; naturalized in the United States from Massachusetts to Florida and west to Wisconsin, Nebraska, and Texas."

2.04	1. Climate Charts. World Climate Maps. http://www.climate-charts.com/World-Climate-Maps.html#rain (Accessed: 13 January 2017) 2. US National Plant Germplasm System. https://npgsweb.ars-grin.gov/gringlobal/taxonomydetail.aspx?21856 (Accessed: 13 January 2017) 3. Invasive Plant Atlas of the United States. http://www.invasiveplantatlas.org/subject.html?sub=3033 (Accessed: 13 January 2017) 4. IUCN Red List. http://www.iucnredlist.org/details/19892702/0 (Accessed: 13 January 2017) 5. eNature. http://www.enature.com/fieldguides/detail.asp?recnum=TS1184 (Accessed: 13 January 2017)	1. Native and naturalized in areas with rainfall within these ranges. 2. Native to China, Hong Kong, Japan, Korea, Taiwan, Bhutan, India, Nepal, Pakistan, Myanmar, Indonesia, Papua New Guinea, and Australia 3. "Native Range: China, Korea, Japan, Formosa, and Himalayas (REHD); China, Japan (BAIL)" 4. "Native: Afghanistan; Bhutan; China (Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning, Shaanxi, Shanxi, Sichuan, Xinjiang, Yunnan, Zhejiang); India; Indonesia; Japan; Korea, Democratic People's Republic of; Korea, Republic of; Lao People's Democratic Republic; Malaysia; Nepal; Pakistan; Papua New Guinea; Philippines; Taiwan, Province of China; Thailand; Viet Nam" 5. "Asia native; naturalized in the United States from Massachusetts to Florida and west to Wisconsin, Nebraska, and Texas."
2.05	1. Invasive Plant Atlas of the United States. http://www.invasiveplantatlas.org/subject.html?sub=3033 (Accessed: 13 January 2017) 2. Southeast Exotic Pest Plant Council. http://www.se-eppc.org/manual/lecu.html (Accessed: 13 January 2017) 3. USDA Plants Database. https://plants.usda.gov/core/profile?symbol=LECU (Accessed: 13 January 2017) 4. IUCN Red List. http://www.iucnredlist.org/details/19892702/0 (Accessed: 13 January 2017)	1. "Native to Asia and introduced into the United States in the late 1800s, it has been widely planted for erosion control, mine reclamation and wildlife habitat." 2. "Lespedeza is present throughout the eastern United States. It is especially common in the piedmont and coastal plain." 3. See range. Widely introduced throughout North America. 4. "Introduced: Australia; United States" 5. Introduced to Fiji, Hawaii, Japan, and the United States
3.01	1. Flora of China. http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=2000 12191 (Accessed: 26 January 2017) 2. Smithsonian National Museum of Natural History. http://botany.si.edu/pacificislandbiodiversity/hawaiianflora/result.cf m?genus=Lespedeza&species=cuneata&rank1=&epithet1= (Accessed: 26 January 2017) 3. eNature. http://www.enature.com/fieldguides/detail.asp?recnum=TS1184 (Accessed: 26 January 2017) 4. New York Flora Atlas. http://newyork.plantatlas.usf.edu/Plant.aspx?id=6550 (Accessed: 26 January 2017)	1. "naturalized in North America and Australia" 2. Naturalized in Hawaii 3. "naturalized in the United States from Massachusetts to Florida and west to Wisconsin, Nebraska, and Texas" 4. Naturalized in New York
3.02	Southeast Exotic Pest Plant Council. http://www.se-eppc.org/manual/lecu.html (Accessed: 13 January 2017) 2. National Park Service. https://www.nps.gov/plants/alien/pubs/midatlantic/lecu.htm (Accessed: 26 January 2017) 3. Global Compendium of Weeds. http://www.hear.org/gcw/species/lespedeza_cuneata/ (Accessed: 26 January 2017)	1. "L. cuneata will grow on a variety of sites including pastures, rangelands, prairies, eroded slopes, and roadsides." 2. "found in a variety of habitats including fields, prairies, floodplains, pond borders, stream banks, swamps, meadows, open woodlands, roadsides and other disturbed grounds" 3. Classified as an agricultural weed, environmental weed, naturalised, noxious weed, sleeper weed, and weed
3.03	Global Compendium of Weeds. http://www.hear.org/gcw/species/lespedeza_cuneata/ (Accessed: 27 January 2017)	Classified as an agricultural weed and a noxious weed

2.04		
3.04	1. Invasive Plant Atlas of the United States. http://www.invasiveplantatlas.org/subject.html?sub=3033 (Accessed: 13 January 2017) 2. Go Botany. https://gobotany.newenglandwild.org/species/lespedeza/cuneata/ (Accessed: 25 January 2017) 3. National Park Service. https://www.nps.gov/plants/alien/pubs/midatlantic/lecu.htm (Accessed: 25 January 2017) 4. Global Compendium of Weeds. http://www.hear.org/gcw/species/lespedeza_cuneata/ (Accessed: 26 January 2017) 5. Plant Conservation Alliance's Alien Plant Working Group. https://www.nps.gov/plants/alien/fact/lecu1.htm (Accessed: 26 January 2017)	1. "Lespedeza cuneata is an extremely aggressive invader of open areas and out competes native vegetation. Once established, Lespedeza cuneata is very difficult to remove due to the seed bank which may remain viable for decades." 2. "Chinese bushclover is native to eastern Asia, and introduced in North America, where it can become very invasive, forming dense stands that crowd out native vegetation. This spread has been rapid, largely originating from deliberate plantings in the 1940s to the 1990s, resulting in 8.6 million acres (3.5 million ha) of the United States being infested by 2003." 3. "Chinese lespedeza poses the greatest threat to open areas such as meadows, prairies, open woodlands, wetland borders and fields. Once established, it outcompetes and displaces native plants, forms extensive monocultures and develops an extensive seed bank in the soil, ensuring its long residence at a site." 4. Classified as an environmental weed and a noxious weed 5. "Chinese lespedeza, sometimes called sericea lespedeza, is primarily a threat to open areas such as meadows, prairies, open woodlands, wetland borders and fields. Once it gains a foothold, it can crowd out native plants and develop an extensive seed bank in the soil, ensuring its long residence at a site. Established dense stands of lespedeza suppress native flora and its high tannin content makes it unpalatable to native wildlife as well as livestock."
3.05	Global Compendium of Weeds. http://www.hear.org/gcw/scientificnames/scinamel.htm (Accessed: 26 January 2017)	1. L. bicolor, L. stipulacea, L. striata, and L. thunbergii are classified as environmental weeds and L. caraganae, L. daurica, L. elegans, L. juncea, L. pilosa, L. stipulacea, L. striata, and L. tomentosa are classified as agricultural weeds
4.01	National Parks Service. https://www.nps.gov/plants/alien/pubs/midatlantic/lecu.htm (Accessed: 25 January 2017) 2. Plant Conservation Alliance's Alien Plant Working Group. https://www.nps.gov/plants/ALIEN/fact/lecu1.htm (Accessed: 25 January 2017)	Produced spines, but unclear if these cause fouling, discomfort, or pain 1. "Leaves: each leaf is divided into three smaller leaflets which are narrowly oblong and pointed, with awl-shaped spines and wedge-shaped bases" 2. "awl-shaped spines"

4.02		1. "One proposed explanation for this invasive success is that L.
4.02		cuneata produces allelopathic chemicals that either directly
		suppresses native
		species or indirectly alters soil chemistry or microbial
		communities in ways that give L.
		cuneata a competitive advantage. Additionally, L. cuneata may
		have competitive
		advantages over native species that operate independently or in
		conjunction with these
		allelopathic mechanisms. To test these hypotheses, I collected
		soil from a previous three-year field experiment in which L.
	1. Wichita State University.	cuneata was established in or excluded from randomly selected
	http://soar.wichita.edu/handle/10057/5164 (Accessed: 25 January	plots in a common soil type and site history. A series of
	2017) 2. Stevens.	greenhouse experiments were designed to isolate putative
	http://www.invasive.org/weedcd/pdfs/tncweeds/lespcun.pdf	allelopathic effects, resource competition and effects of
	(Accessed: 26 January 2017) 3. Coykendall, Katherine (2011).	neighbor identity on native plants. Invaded soil had positive
	Competition and Allelopathy in Invasive Lespedeza cuneata. 7th	effects on L. cuneata
	Annual Symposium: Graduate Research and Scholarly Projects.	biomass while native biomass decreased for several native
	Wichita, KS: Wichita State University, p. 60-61.	species. Additionally, water
	http://soar.wichita.edu/handle/10057/3573 (Accessed: 8 February	manipulation resulted in significant interactions with soil history or
	2017)	neighbor identity for
	,	a subset of the native species, indicating that resource
		competition may impact invasive
		success of sericea. These results support the hypothesis that L.
		cuneata can create a
		positive feedback that may increase invasion potential, as well as
		directly impacting growth of natives, and these effects may be
		intensified by low water conditions." 2. "Allelopathic compounds in
		L. cuneata, such as tannins, inhibit the growth of other plants
		while also making it unpalatable to animals." 3. "Invasive species
		such as Lespedeza cuneata (sericea) can have detrimental
		effects on invaded ecosystems. One proposed explanation for
4.03		No evidence
4.04	Southeast Exotic Pest Plant Council. http://www.se-	1. "Although high in crude protein, lespedeza is not a preferred for
	eppc.org/manual/lecu.html (Accessed: 13 January 2017) 2.	forage due to it high concentration of tannins."; "Because it is
	National Park Service.	unpalatable, wildlife may forage on surrounding native vegetation,
	https://www.nps.gov/plants/alien/pubs/midatlantic/lecu.htm	thereby increasing its rate of spread." 2. "Its high tannin content
	(Accessed: 26 January 2017) 3. Stevens.	makes it unpalatable to livestock and most native wildlife." 3. "As
	http://www.invasive.org/weedcd/pdfs/tncweeds/lespcun.pdf	the plant ages, levels of tannins also increase, and grazers will
	(Accessed: 26 January 2017)	often cease to feed on L. cuneata if other palatable forage is
4.6-	· ·	available."
4.05	1. Stevens.	1. "Although originally introduced as a forage plant, L. cuneata
	http://www.invasive.org/weedcd/pdfs/tncweeds/lespcun.pdf	has stems that become tough and unpalatable unless kept
	(Accessed: 26 January 2017) 2. US Forest Service.	continually mowed or grazed." 2. "In the 1940s in Missouri,
	https://www.fs.fed.us/database/feis/plants/forb/lescun/all.html	sericea lespedeza was widely planted for wildlife cover and
4.00	(Accessed: 8 February 2017) 1. Illinois Wildflowers.	forage"
4.06		
	http://www.illinoiswildflowers.info/weeds/plants/silky_bushclover.ht m (Accessed: 25 January 2017) 2. Stevens.	1. "not bothered much by foliar disease" 2. "rarely bothered by
	http://www.invasive.org/weedcd/pdfs/tncweeds/lespcun.pdf	insects or disease"
	(Accessed: 8 February 2017)	
4.07	Southeast Exotic Pest Plant Council. http://www.se-	"L. cuneata is used as a medicinal herb to treat ailments such
4.07	eppc.org/manual/lecu.html (Accessed: 13 January 2017)	as skin ulcerations, dysentery, enteritis, and hernias."
	opposing/manageodamini (10000000. To bandary 2011)	ao omi alcorationo, ayoontory, ontontio, ana nomiao.

4.08		1. "As of 2010, there was little information about sericea
4.00		lespedeza fuel characteristics. A southern silvicultural
	1. US Forest Service.	•
	https://www.fs.fed.us/database/feis/plants/forb/lescun/all.html	management guide reports that sericea lespedeza is not a fire
	(Accessed: 6 February 2017)	hazard [52], and Mooers and Odgen [114] report that fire spread
		may be limited in pure sericea lespedeza stands even when the
		previous year's dead stems are present."
4.09	Southeast Exotic Pest Plant Council. http://www.se-eppc.org/manual/lecu.html (Accessed: 13 January 2017) 2. Illinois Wildflowers. http://www.illinoiswildflowers.info/weeds/plants/silky_bushclover.htm (Accessed: 25 January 2017) 3. National Park Service. https://www.nps.gov/plants/alien/pubs/midatlantic/lecu.htm (Accessed: 26 January 2017)	"It is moderately shade tolerant and will persist along wooded edges and sparsely forested areas." 2. "usually found in full sunlight" 3. "prefers full sun and is not tolerant of much shade"
4.10	Southeast Exotic Pest Plant Council. http://www.se-eppc.org/manual/lecu.html (Accessed: 13 January 2017) 2. IUCN Red List. http://www.iucngisd.org/gisd/species.php?sc=270 (Accessed: 13 January 2017)	1. "Lespedeza will grow in a wide variety of soils and is very tolerant of drought." 2. "Lespedeza cuneata grows best in deep soils, such as deep sands with organic matter or sandy loams with clay loam subsoil. It will also grow on strongly acidic to neutral soils."; "L. cuneata establishes readily in nutrient poor soils."
4.11	Invasive Plant Atlas of the United States. http://www.invasiveplantatlas.org/subject.html?sub=3033 (Accessed: 13 January 2017) 2. Illinois Wildflowers. http://www.illinoiswildflowers.info/weeds/plants/silky_bushclover.ht m (Accessed: 25 January 2017)	1. "Lespedeza cuneata is an upright semi-woody forb reaching 3-6 ft." 2. "This perennial wildflower is 2-4' tall. It branches frequently into multiple major stems at the base, which divide into much smaller side stems. These stems are held stiff and straight at about a 45° angle from the ground or from each other. The entire plant has a shrub-like appearance that is vase-shaped at the base."
4.12	1. North Carolina State University. https://www.ncsu.edu/goingnative/howto/mapping/invexse/sericea l.html (Accessed: 6 February 2017) 2. Nebraska Weed Control Association. http://www.neweed.org/NeWeeds/Sericea_Lespedeza.pdf (Accessed: 6 February 2017) 3. GoBotany. https://gobotany.newenglandwild.org/species/lespedeza/cuneata/ (Accessed: 6 February 2017)	1. "forms dense stands by sprouting from roots" 2. "In natural areas, these stands can become so dense that native plants are reduced."; "Dense monocultures of thickets are formed due to its ability to sprout from root crowns. Established sericea lespedeza plants will reduce or eliminate competing vegetation and restrict the amount of light reaching other plants." 3. "can become very invasive, forming dense stands that crowd out native vegetation"
5.01	Go Botany. https://gobotany.newenglandwild.org/species/lespedeza/cuneata/ (Accessed: 25 January 2017)	"Habitat: terrestrial"
5.02	USDA Plants Database. https://plants.usda.gov/core/profile?symbol=LECU (Accessed: 13 January 2017)	1. "Growth Habit: Forb/herb, Subshrub"
5.03	1. USDA Plant Fact Sheet. Lespedeza cuneata (Accessed: 6 February 2017) 2. Plants for a Future. http://www.pfaf.org/user/Plant.aspx?LatinName=Lespedeza+cune ata (Accessed: 6 February 2017) 3. Science Daily. https://www.sciencedaily.com/releases/2014/10/141008131342.ht m (Accessed: 6 February 2017) 4. Invasive Plant Atlas. http://www.invasiveplantatlas.org/subject.html?sub=3033 (Accessed: 6 February 2017) 5. Illinois Wildflowers. http://www.illinoiswildflowers.info/weeds/plants/silky_bushclover.ht m (Accessed: 6 February 2017)	inches, when they become woody and fibrous." 2. "The plant has an extensive root system and fixes atmospheric nitrogen through bacteria that live on its roots." 3. Nitrogen fixing 4. "semi-woody forb" 5. "It is herbaceous, notwithstanding appearances to the contrary, as all the stems die down to the ground each winter."
5.04	1. Southeast Exotic Pest Plant Council. http://www.se-eppc.org/manual/lecu.html (Accessed: 13 January 2017) 2. Illinois Wildflowers. http://www.illinoiswildflowers.info/weeds/plants/silky_bushclover.ht m (Accessed: 25 January 2017) 3. National Park Service. https://www.nps.gov/plants/alien/pubs/midatlantic/lecu.htm (Accessed: 26 January 2017)	No evidence of these specialized structures

6.01		No evidence
6.02	1. Illinois Wildflowers.	
0.02	http://www.illinoiswildflowers.info/weeds/plants/silky_bushclover.ht m (Accessed: 25 January 2017) 2. National Park Service. https://www.nps.gov/plants/alien/pubs/midatlantic/lecu.htm (Accessed: 26 January 2017) 3. US Forest Service. https://www.fs.fed.us/database/feis/plants/forb/lescun/all.html (Accessed: 26 January 2017)	"This wildflower spreads by reseeding itself and can form large colonies." 2. Spreads by seed 3. Reproduces through setting seed
6.03	1. Clewell, Andre F. 1967. Natural hybrids between "sericea" and three native American lespedezas. The Journal of Heredity. 58: 57-58. [80057] (Accessed: 13 January 2017) 2. US Forest Service. https://www.fs.fed.us/database/feis/plants/forb/lescun/all.html (Accessed: 25 January 2017)	1. Observed spontaneous hybrids between sericea lespedeza and other native lespedezas (creeping lespedeza, tall lespedeza, and trailing lespedeza (L. procumbens)) in Georgia and Alabama. Hybrids grew in the vicinity of their parents. A sericea lespedeza × trailing lespedeza hybrid was described as especially "vigorous", and a sericea lespedeza × creeping lespedeza hybrid had reproduced by rhizomes. 2. spontaneous hybrids between sericea lespedeza and other native lespedezas have been observed in Georgia and Alabama; "A sericea lespedeza × trailing lespedeza hybrid was described as especially "vigorous", and a sericea lespedeza × creeping lespedeza hybrid had reproduced by rhizomes "
6.04	Stevens. http://www.invasive.org/weedcd/pdfs/tncweeds/lespcun.pdf (Accessed: 26 January 2017) 2. US Forest Service. https://www.fs.fed.us/database/feis/plants/forb/lescun/all.html (Accessed: 8 February 2017)	1. "Cleistogamous flowers of L. cuneata are always self-fertilized (versus cross-fertilized in chasmogamous flowers), typically do not open, and do not have showy petals." 2. "Sericea lespedeza utilized 3 pollination modes: self-fertilization of cleistogamous flowers, insect pollination of chasmogamous flowers, and delayed self-fertilization of chasmogamous flowers that failed to be insect pollinated within a certain period of time."
6.05	1. Woods, Jonas, and Ferguson. Biological Invasions, Volume: 14, Issue: 5, Starting Page: 1045, Ending Page: 1059 Date: 2012. http://krex.k-state.edu/dspace/handle/2097/13915 (Accessed: 6 February 2017) 2. US Forest Service. https://www.fs.fed.us/database/feis/plants/forb/lescun/all.html (Accessed: 8 February 2017)	1. "The invasive Lespedeza cuneata attracts more insect pollinators than native congeners in tallgrass prairie with variable impacts"; frequently visited by the common honeybee 2. "Sericea lespedeza utilized 3 pollination modes: self-fertilization of cleistogamous flowers, insect pollination of chasmogamous flowers, and delayed self-fertilization of chasmogamous flowers that failed to be insect pollinated within a certain period of time."; "greater insect visitation rate/plant for sericea lespedeza than any native species"; often pollinated by bees
6.06		No evidence of vegetative spread. Spread by seed.
6.07	1. Ohlenbusch, Paul D.; Bidwell, Terry; Fick, Walter H.; Kilgore, Gary; Scott, William; Davidson, Jeff; Clubine, Steve; Mayo, Jim; Coffin, Mitch. 2007. Sericea lespedeza: history, characteristics, and identification. MF-2408. Manhattan, KS: Kansas State University Agricultural Experiment Station; Cooperative Extension Service. 6 p. Available online: http://www.ksre.ksu.edu/library/crpsl2/mf2408.pdf. [80166] 2. Rossow, Melissa A. 2009. Sericea lespedeza in Kansas, including erect bush-clovers in Kansas, [Online]. In: Kansas School Naturalist. 56(Summer). Emporia, KS: Emporia State University, Department of Biology (Producer). Available: http://www.emporia.edu/ksn/v56-summer2009/text.htm [2010, July 20]. [80060] 3. Farris, Rodney Lewis. 2006. Adaptation, biology, and control of sericea lespedeza (Lespedeza cuneata), an invasive species. Stillwater, OK: Oklahoma State University. 137 p. Dissertation. [80206]	1.2. Seed is often produced in the first year of growth 3. In a field experiment at the Agronomy Research Station in Stillwater, Oklahoma, sericea lespedeza seedlings flowered at 12 weeks old and produced seed as early as 15 weeks old
7.01	Southeast Exotic Pest Plant Council. http://www.se-eppc.org/manual/lecu.html (Accessed: 13 January 2017) 2. National Park Service. https://www.nps.gov/plants/alien/pubs/midatlantic/lecu.htm (Accessed: 26 January 2017)	1. "L. cuneata will grow on a variety of sites including pastures, rangelands, prairies, eroded slopes, and roadsides." 2. "found in a variety of habitats including fields, prairies, floodplains, pond borders, stream banks, swamps, meadows, open woodlands, roadsides and other disturbed grounds"

7.02	Invasive Plant Atlas of the United States. http://www.invasiveplantatlas.org/subject.html?sub=3033 (Accessed: 13 January 2017) 2. US Forest Service. https://www.fs.fed.us/database/feis/plants/forb/lescun/all.html (Accessed: 6 February 2017) 3. Seedland. http://www.seedland.com/mm5/merchant.mvc?Screen=CTGY&St ore_Code=Seedland&Category_Code=FSLESP-SER (Accessed: 26 January 2017)	"widely planted for erosion control, mine reclamation and wildlife habitat" 2. Planted for erosion control and wildlife cover and forage 3. Available for purchase online
7.03	US Forest Service. https://www.fs.fed.us/database/feis/plants/forb/lescun/all.html (Accessed: 6 February 2017) 2. Illinois Wildflowers. http://www.illinoiswildflowers.info/weeds/plants/silky_bushclover.ht m (Accessed: 6 February 2017)	contaminant of seed, and should be removed."
7.04	Southeast Exotic Pest Plant Council. http://www.se-eppc.org/manual/lecu.html (Accessed: 13 January 2017)	"Within the Lespedeza genus there are no specialized structures for seed dispersal."
7.05	Missouri Department of Transportation. https://mdc.mo.gov/conmag/2004/07/missouris-silent-thief (Accessed: 6 February 2017)	The seeds float, so the plant spreads easily along riverbanks and lakeshores."
7.06	Southeast Exotic Pest Plant Council. http://www.se-eppc.org/manual/lecu.html (Accessed: 13 January 2017) 2. National Park Service. https://www.nps.gov/plants/alien/pubs/midatlantic/lecu.htm (Accessed: 26 January 2017) 3. Missouri Department of Transportation. https://mdc.mo.gov/conmag/2004/07/missourissilent-thief (Accessed: 6 February 2017)	1. "Dispersal is aided by animals consuming the fruits and passing the seeds. A study on natural populations found that several species of Lespedeza comprise 1.5% to 86.8% of the annual diet of bobwhite quail in the southeastern U.S." 2. "Spreads: by seed that is consumed by animals such as bobwhite quail and passed through digestive tract and deposited in new locations." 3. "Birds and other animals also distribute the seeds."
7.07	Southeast Exotic Pest Plant Council. http://www.se-	Southeast Exotic Pest Plant Council. http://www.se-
	eppc.org/manual/lecu.html (Accessed: 13 January 2017)	eppc.org/manual/lecu.html (Accessed: 13 January 2017)
7.08	Southeast Exotic Pest Plant Council. http://www.se-eppc.org/manual/lecu.html (Accessed: 13 January 2017) 2. National Park Service. https://www.nps.gov/plants/alien/pubs/midatlantic/lecu.htm (Accessed: 26 January 2017) 3. Missouri Department of Transportation. https://mdc.mo.gov/conmag/2004/07/missouris-silent-thief (Accessed: 6 February 2017)	"Dispersal is aided by animals consuming the fruits and passing the seeds." 2. "Spreads: by seed that is consumed by animals such as bobwhite quail and passed through digestive tract and deposited in new locations." 3. "Birds and other animals also distribute the seeds."
8.01	1. Invasive Plant Atlas of the United States. http://www.invasiveplantatlas.org/subject.html?sub=3033 (Accessed: 13 January 2017) 2. Missouri Department of Transportation. https://mdc.mo.gov/conmag/2004/07/missouris- silent-thief (Accessed: 6 February 2017) 3. Guernsey, Walter J. 1970. Sericea lespedeza: Its use and management. Farmers' Bulletin No. 2245. Washington, DC: U.S. Department of Agriculture. 29 p. [17264]	"Fruit is a flat ovate to round single-seeded pod 0.12-0.15 in. (3-4 mm) wide." 2. "A single stem of sericea can produce more than a thousand seeds." 3. Seed production rates of 150 million to 300 million seeds/acre were reported for cultivated stands
8.02	Invasive Plant Atlas of the United States. http://www.invasiveplantatlas.org/subject.html?sub=3033 (Accessed: 13 January 2017) 2. Southeast Exotic Pest Plant Council. http://www.se-eppc.org/manual/lecu.html (Accessed: 13 January 2017)	1. "Once established, Lespedeza cuneata is very difficult to remove due to the seed bank which may remain viable for decades." 2. "Mature seeds of this genus remain viable for up to twenty years; one study found a germination rate of 60% after cold storage for 55 years. Seedlings may represent only 1% of the seeds actually available in the soil."

8.03		"Herbicidal controls are effective as long as the plants are
		actively growing. Glyphosate, triclopyr and metsulfuron have been
		shown to be effective in controlling Chinese lespedeza. The
		addition of a non-ionic surfactant at a concentration of 0.5%
		improves the effectiveness of foliar treatments. A 1%-2% solution
		triclopyr or glyphosate thoroughly mixed with water is effective
		during the vegetative stage prior to branching or during flowering.
		Metsulfuron methyl should be applied at a rate of 0.3g/gallon of
	1. Southeast Exotic Pest Plant Council. http://www.se-	water. Treatments should cover the leaves and stems of plants to
	eppc.org/manual/lecu.html (Accessed: 13 January 2017) 2. USDA	the point of runoff. Read the herbicide label thoroughly prior to
	Forest Service.	use."; "Broadcast treatments are appropriate for large infestations
	https://www.na.fs.fed.us/fhp/invasive_plants/weeds/sericea-	such as fields or prairies. Since native plants will be intermingled
	lespedeza.pdf (Accessed: 8 February 2017)	with lespedeza, triclopyr and metsulfuron are the preferred
		herbicides due to their selective characteristics. Apply triclopyr at
		a rate of 1.0-1.5 pints per acre." 2. "It can be effectively controlled
		using any of several readily
		available general use herbicides such as triclopyr, glyphosate,
		clopyralid,
		and metsulfuron methyl, in early to mid-summer. Repeated
		applications
		may be necessary."
8.04	Invasive Plant Atlas of the United States.	
	http://www.invasiveplantatlas.org/subject.html?sub=3033	
	(Accessed: 13 January 2017) 2. US Forest Service.	"U.S. Autumn dispersal is aided by the haying of infested
	· · · · · · · · · · · · · · · · · · ·	fields." 2. "sprouts following damage of aboveground tissue" 3.
	(Accessed: 8 February 2017) 3. Brandon et al. 2004. Mechanisms	
	for dominance in an early sucessional old field by the invasive non-	significantly with mowing frequency"
	native Lespedeza cuneata (Dum. Cours.) G. Don. Biological	
	Invasions 6:483-493	
8.05		"Preliminary investigations indicate potential for lespedeza
		webworm (Tetralopha scortealis) as a biological control agent.
	1. US Forest Service.	Studies and observations from Kansas revealed that lespedeza
	https://www.fs.fed.us/database/feis/plants/forb/lescun/all.html	webworms were aggressive sericea lespedeza defoliators and
	(Accessed: 8 February 2017)	reduced seed production by up to 98%. While the lespedeza
		webworm could be a useful biocontol, it also attacks native
		lespedezas, so it is not likely to be released as a biocontrol"