Family: Acanthaceae

Print Date: 2/8/2012

Taxon: Strobilanthes dyeriana

Synonym: Strobilanthes auriculata var. dyeriana (Mast., Common Name: Persian shield

Perilepta dyeriana (Masters) Bremekamp

	estionaire :	current 20090513	Assessor: Chuck Chimera	Designation: H(HPWRA)		
Sta	tus:	Assessor Approved	Data Entry Person:	Chuck Chimera	WRA Score 7	
101	Is the species high	hly domesticated?			y=-3, n=0	n
102	Has the species become naturalized where grown?			y=1, n=-1		
103	Does the species l	have weedy races?			y=1, n=-1	
201		tropical or subtropical climat ropical'' for ''tropical or subtı		ily wet habitat, then	(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
202	Quality of climat	e match data			(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
203	Broad climate su	itability (environmental versa	tility)		y=1, n=0	n
204	Native or natural	lized in regions with tropical (or subtropical climates		y=1, n=0	y
205	Does the species l	have a history of repeated into	roductions outside its na	tural range?	y=-2, ?=-1, n=0	y
301	Naturalized beyond native range		y = 1*multiplier (see Appendix 2), n= question 205	у		
302	Garden/amenity/	disturbance weed			n=0, y = 1*multiplier (see Appendix 2)	у
303	Agricultural/fore	estry/horticultural weed			n=0, y = 2*multiplier (see Appendix 2)	
304	Environmental w	veed			n=0, y = 2*multiplier (see Appendix 2)	
305	Congeneric weed	l			n=0, y = 1*multiplier (see Appendix 2)	y
401	Produces spines, thorns or burrs			y=1, n=0	n	
402	Allelopathic			y=1, n=0	n	
403	Parasitic		y=1, n=0	n		
404	Unpalatable to gr	razing animals			y=1, n=-1	y
405	Toxic to animals				y=1, n=0	n
406	Host for recogniz	zed pests and pathogens			y=1, n=0	n
407	Causes allergies or is otherwise toxic to humans		y=1, n=0			
408	Creates a fire haz	zard in natural ecosystems			y=1, n=0	n
409	Is a shade tolerar	nt plant at some stage of its lif	e cycle		y=1, n=0	y
410	Tolerates a wide	range of soil conditions (or lin	nestone conditions if not	a volcanic island)	y=1, n=0	
411	Climbing or smo	thering growth habit			y=1, n=0	n

412	Forms dense thickets	y=1, n=0		
501	Aquatic	y=5, n=0	n	
502	Grass	y=1, n=0	n	
503	Nitrogen fixing woody plant	y=1, n=0	n	
504	Geophyte (herbaceous with underground storage organs bulbs, corn	ns, or tubers) y=1, n=0	n	
601	Evidence of substantial reproductive failure in native habitat	y=1, n=0	n	
602	Produces viable seed	y=1, n=-1	y	
603	Hybridizes naturally	y=1, n=-1		
604	Self-compatible or apomictic	y=1, n=-1		
605	Requires specialist pollinators	y=-1, n=0		
606	Reproduction by vegetative fragmentation	y=1, n=-1	y	
607	Minimum generative time (years)	1 year = 1, 4+ years =	2 or 3 years = 0 , >3	
701	Propagules likely to be dispersed unintentionally (plants growing in he areas)	avily trafficked y=1, n=-1		
702	Propagules dispersed intentionally by people	y=1, n=-1	y	
703	Propagules likely to disperse as a produce contaminant	y=1, n=-1	n	
704	Propagules adapted to wind dispersal	y=1, n=-1	n	
705	Propagules water dispersed	y=1, n=-1		
706	Propagules bird dispersed	y=1, n=-1	n	
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n	
708	Propagules survive passage through the gut	y=1, n=-1		
801	Prolific seed production (>1000/m2)	y=1, n=-1	n	
802	Evidence that a persistent propagule bank is formed (>1 yr)	y=1, n=-1		
803	Well controlled by herbicides	y=-1, n=1		
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	y	
805	Effective natural enemies present locally (e.g. introduced biocontrol ag	y=-1, n=1		
	Г	Designation: H(HPWRA)	WRA Score 7	

uppor	ting Data:	
101	2000. Whistler, W.A Tropical Ornamentals: A Guide. Timber Press, Portland, OR	[Is the species highly domesticated? No] No evidence
101	2005. Staples, G.W./Herbst, D.R A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Is the species highly domesticated? No] No evidence
102	2012. WRA Specialist. Personal Communication.	NA
103	2005. Staples, G.W./Herbst, D.R A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	NA
201	2000. Whistler, W.A Tropical Ornamentals: A Guide. Timber Press, Portland, OR	[Species suited to tropical or subtropical climate(s) 2-High] "native to Myanmar (Burma)"
202	2000. Whistler, W.A Tropical Ornamentals: A Guide. Timber Press, Portland, OR	[Quality of climate match data 2-high] "native to Myanmar (Burma)"
203	2003. Gamrod, E.E Flowering Control and Production of Strobilanthes dyerianus Mast. (Persian Shield). MSc Thesis. Virginia Polytechnic Institute and State University, Blacksburg, VA	[Broad climate suitability (environmental versatility)? No] "When grown in the landscape, the tropical perennial S. dyerianus can grow to a small shrub, hardy to USDA zone 9. This plant thrives in warm temperatures, growing quickly with the onset of hot summer days, and performs well in most of the country, either as a landscape or container plant (Armitage, 1997)."
204	2000. Whistler, W.A Tropical Ornamentals: A Guide. Timber Press, Portland, OR	[Native or naturalized in regions with tropical or subtropical climates? Yes] "native to Myanmar (Burma)"
205	2000. Whistler, W.A Tropical Ornamentals: A Guide. Timber Press, Portland, OR	[Does the species have a history of repeated introductions outside its natural range? Yes] "widely if not commonly cultivated in the tropics for its iridescent foliage with silver to purple markings on the upper surface and purple below."
301	2001. Department of Natural Resources & Mines. Weed Pocket Guide: Agricultural & Environmental Weeds - Far North Queensland. Queensland Government, http://www.wettropics.gov.au/st/rainforest_explore r/Resources/Documents/8to9/WeedIDHandbook.pdf	[Naturalized beyond native range? Yes] "Native to Burma, Persian shield was introduced to Queensland as a garden plant. It invades the understorey of rainforest margins and creek lines." "This species is listed as an Undesirable Plant in the Wet Tropics World Heritage Area. Currently not declared, although its control is highly recommended"
301	2008. Foxcroft, L.C./Richardson, D.M./Wilson, J.R.U Ornamental Plants as Invasive Aliens: Problems and Solutions in Kruger National Park, South Africa. Environmental Management. 41: 32–51.	[Naturalized beyond native range? No evidence in Kruger NP] "Table 2 Ornamental alien plant species recorded per camp in the Kruger National Park, indicating the number of camps in which each species has been recorded, as well as mode of introduction" "Strobilanthes dyerianus Evidence of naturalization? = No"
301	2009. Chong, K.Y./Tan, H.T.W./Corlett, R.T A Checklist of the Total Vascular Plant Flora of Singapore: Native, Naturalized and Cultivated Species. Raffles Museum of Biodiversity Research, National University of Singapore, Singapore	[Naturalized beyond native range? No evidence from Singapore] "Strobilanthes dyeriana Mast.; Acanthaceae; cultivated only"
302	2010. Queensland Government. Fact sheet - Pest Plant: Persian shield - Strobilanthes dyerianus (PP114). Dept. of Employment, Economic Development & Innovation, http://www.dpi.qld.gov.au/documents/Biosecurity_ EnvironmentalPests/IPA-Persian-Shield- PP114.pd	[Garden/amenity/disturbance weed? Yes] "Native to Burma, Persian shield was introduced to Queensland as a garden plant. It invades the understorey of rainforest margins and creek lines." [Garden escape with possible adverse impacts to environment]
304	2010. Queensland Government. Fact sheet - Pest Plant: Persian shield - Strobilanthes dyerianus (PP114). Dept. of Employment, Economic Development & Innovation, http://www.dpi.qld.gov.au/documents/Biosecurity_ EnvironmentalPests/IPA-Persian-Shield- PP114.pd	[Environmental weed? Potentially] "Native to Burma, Persian shield was introduced to Queensland as a garden plant. It invades the understorey of rainforest margins and creek lines." [Impacts on environment unknown]
305	2004. Meyer, J-Y./Lavergne, C Beautés fatales: Acanthaceae species as invasive alien plants on tropical Indo-Pacific Islands. Diversity and Distributions. 10: 333-347.	[Congeneric weed? Yes] "Strobilanthus hamitonianus is an invasive weed in La Réunion and Mauritius"

401	2000. Whistler, W.A Tropical Ornamentals: A Guide. Timber Press, Portland, OR	[Produces spines, thorns or burrs? No] "Herb, perennial, to 1.8 m high (6 ft) but usually much less. Leaves simple, opposite in unequally sized pairs, blade elliptic, usually 4-20 cm long (1 5/5-8 in), subsessile, with pink to purple between the veins on the upper size, purple on the lower."
402	2000. Whistler, W.A Tropical Ornamentals: A Guide. Timber Press, Portland, OR	[Allelopathic? No] "It is often grown in planters, in pots, in mass plantings, or mixed with other ornamentals and is also popular as an indoor plant in cooler climates." [No evidence]
403	2000. Whistler, W.A Tropical Ornamentals: A Guide. Timber Press, Portland, OR	[Parasitic? No] "Herb, perennial, to 1.8 m high (6 ft) but usually much less." [Acanthaceae. Not parasitic]
404	2012. San Marcos Growers. Products - Strobilanthes dyerianus. http://www.smgrowers.com/products/plants/plantd isplay.asp?plant_id=2866	[Unpalatable to grazing animals? Yes] "Deer Tolerant: Yes" "A great plant for containers. It is deer and rabbit resistant."
405	2008. Wagstaff, D.J International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL	[Toxic to animals? No] No evidence
405	2012. Voldeck, L.B Non-Toxic Houseplants. http://www.bellaonline.com/articles/art40835.asp	[Toxic to animals? No. No evidence] "One thing it is always nice to know when purchasing houseplants is whether or not the plant is dangerous to children or pets. There are many different ways a plant can be dangerous. They can have poisonous compounds that will sicken small children or pets to varying degrees. Plants can contain oxalates that would make you think you're eating fiberglass. Some plants can cause skin reactions, called dermatitis. These are the types of dangers you can avoid by sticking with the plants listed here. Remember that there are always special cases where one may be allergic to a plant and have an unusual reaction. To be safe, it's not a bad idea to keep houseplants out of reach of children and pets at all times."
406	1987. Clay, H.F./Hubbard, J.C The Hawaii Garden: Tropical Shrubs. University of Hawaii Press, Honolulu, HI	[Host for recognized pests and pathogens? No] "Insects/Diseases: None of importance"
406	2012. Missouri Botanical Garden. Gardens & Gardening > Your Garden > Plant Finder > Plant Details - Strobilanthes dyerianus. http://www.missouribotanicalgarden.org/gardensgardening/your-garden/plant-finder/plantdetails/kc/a122/strobilanthes-dyerianus.as	[Host for recognized pests and pathogens? No] "No serious insect or disease problems. Watch for spider mites on indoor plants."
407	2012. Shoot Gardening. Strobilanthes dyeriana (Persian shield). http://www.shootgardening.co.uk/plant/strobilanthes-dyeriana	[Causes allergies or is otherwise toxic to humans? Possibly] "Toxicity: May cause skin allergies."
408	2001. Department of Natural Resources & Mines. Weed Pocket Guide: Agricultural & Environmental Weeds - Far North Queensland. Queensland Government, http://www.wettropics.gov.au/st/rainforest_explore r/Resources/Documents/8to9/WeedIDHandbook.pdf	[Creates a fire hazard in natural ecosystems? NO] No evidence
408	2005. Staples, G.W./Herbst, D.R A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Creates a fire hazard in natural ecosystems? NO] "It thrives only in moist, protected, semi-shady situations where it becomes a shrub 5-8' tall with an open crown of iridescent purple-and-green foliage." [No evidence, & unlikely based on habitat]
409	2000. Whistler, W.A Tropical Ornamentals: A Guide. Timber Press, Portland, OR	[Is a shade tolerant plant at some stage of its life cycle? Yes] "Fertile, moist, but well-drained soils in partially shaded places are preferred."
409	2004. Armitage, A.M Armitage's garden annuals: a color encyclopedia. Timber Press, Portland, OR	[Is a shade tolerant plant at some stage of its life cycle? Possibly] "Persian shield can handle afternoon shade, particularly in the South, where midday sun can cause premature wilting of the large leaves. Otherwise full sun."
409	2012. Dave's Gardern. PlantFiles: Persian Shield - Strobilanthes dyerianus. http://davesgarden.com/guides/pf/go/516/	[Is a shade tolerant plant at some stage of its life cycle? Yes] "Sun Exposure: Partial to Full Shade"
409	2012. San Marcos Growers. Products - Strobilanthes dyerianus. http://www.smgrowers.com/products/plants/plantd isplay.asp?plant_id=2866	[Is a shade tolerant plant at some stage of its life cycle? Yes] "Plant in shade or filtered light in a well drained soil and irrigate regularly."

410	2012. Missouri Botanical Garden. Gardens & Gardening > Your Garden > Plant Finder > Plant Details - Strobilanthes dyerianus. http://www.missouribotanicalgarden.org/gardensgardening/your-garden/plant-finder/plant-details/kc/a122/strobilanthes-dyerianus.as	[Tolerates a wide range of soil conditions? Possibly No] "Tolerates: Wet Soil"
410	2012. Shoot Gardening. Strobilanthes dyeriana (Persian shield). http://www.shootgardening.co.uk/plant/strobilanthes-dyeriana	[Tolerates a wide range of soil conditions? Possibly Yes] "Soil types: Loamy, Sandy" "Soil pH: Acid, Alkaline, Neutral"
411	2000. Whistler, W.A Tropical Ornamentals: A Guide. Timber Press, Portland, OR	[Climbing or smothering growth habit? No] "Herb, perennial, to 1.8 m high (6 ft) but usually much less."
412	1955. Grant, W.F A Cytogenetic Study in the Acanthaceae. Brittonia. 8(2): 121-149.	[Forms dense thickets? Unknown] "Species of Strobilanthes, which are somewhat shrubby, are cultivated for their attractive flowers and their foliage, which in some species is variegated. In nature members of the genus occur gregariously in vast numbers to form almost the sole undergrowth in forests" [Species not identified]
501	2005. Staples, G.W./Herbst, D.R A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Aquatic? No] "It thrives only in moist, protected, semi-shady situations where it becomes a shrub 5-8' tall with an open crown of iridescent purple-and-green foliage."
502	2003. Gamrod, E.E Flowering Control and Production of Strobilanthes dyerianus Mast. (Persian Shield). MSc Thesis. Virginia Polytechnic Institute and State University, Blacksburg, VA	[Grass? No] "Strobilanthes dyerianus is classified in division Magnoliophyta, class Magnoliopsida, order Scrophulariales and family Acanthaceae (Watson and Dallwitz, 1992)."
503	2003. Gamrod, E.E Flowering Control and Production of Strobilanthes dyerianus Mast. (Persian Shield). MSc Thesis. Virginia Polytechnic Institute and State University, Blacksburg, VA	[Nitrogen fixing woody plant? No] "Strobilanthes dyerianus is classified in division Magnoliophyta, class Magnoliopsida, order Scrophulariales and family Acanthaceae (Watson and Dallwitz, 1992)."
504	2005. Staples, G.W./Herbst, D.R A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Geophyte (herbaceous with underground storage organs bulbs, corms, or tubers)? No] "It thrives only in moist, protected, semi-shady situations where it becomes a shrub 5-8' tall with an open crown of iridescent purple-and-green foliage."
601	2005. Staples, G.W./Herbst, D.R A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Evidence of substantial reproductive failure in native habitat? No] No evidence
602	2012. Cool Tropical Plants.com. Persian shield - Strobilanthes dyerianus. http://www.cooltropicalplants.com/Persian- shield.html	[Produces viable seed? Possibly Not in cultivation] "Left on the plant the flowers eventually produce seed pods but so far the seeds within have failed to germinate."
602	2012. Kirman Contemporary Space Design. Strobilanthes dyerianus 'Persian Shield' (Strobilanthes). http://www.kirmandesign.com/plants/3C96EDD94 4AD40C2B88525E3048195AF.asp	[Produces viable seed? Yes] "Propagation: Seeds or cuttings. Seeds - sow seeds at 13-18 degrees in spring."
602	2012. Shoot Gardening. Strobilanthes dyeriana (Persian shield). http://www.shootgardening.co.uk/plant/strobilanthes-dyeriana	[Produces viable seed? Yes] "Propagation methods: Seed, Softwood cuttings"
603	2012. WRA Specialist. Personal Communication.	[Hybridizes naturally? Unknown]
604	2008. Sharma, M.V./Kuriakose, G./Shivanna, K.R Reproductive strategies of Strobilanthes kunthianus, an endemic, semelparous species in southern Western Ghats, India. Botanical Journal of the Linnean Society. 157: 155–163.	[Self-compatible or apomictic? Possibly No] "As the species is self-compatible, the prevailing high degree of geitonogamous pollinations does not interfere with fruit set." [Related species Strobilanthes kunthianus is self-compatible; Unknown for S. dyeriana]

605	2000 Manktolow M. The filement ourtain: a	[Requires specialist pollinators? Probably bee pollinated] "Although the phylogeny
605	2000. Manktelow, M The filament curtain: a structure important to systematics and pollination biology in the Acanthaceae. BofunicalJournal of the Linnean Society. 133: 129-160.	of Acanthaceae presented by Scotland et al. (1995) includes only a few taxa with a filament curtain, it is still useful to optimize the filament curtain as a character onto the Ruellieae s.1. clade (Fig. 8). A phaulopsoid filament curtain is optimized as the plesiomorphic state within Ruellieae s.1. Apomorphic states are the presence of transverse corolla folds (Brilhntuisia and Hygrophila), strobilanthoid filament curtain (Strobilanthes and Hemigraphis), and reductions of the filament curtain (Sanchezia). This suggests that the original filament curtain was of the phaulopsoid type. This type is generally found in melittophilous flowers, suggesting that the filament curtain origined in association with bee pollination. Adaptations and reductions of the filament curtain would subsequently have occurred as responses to shifts of pollinators."
605	2004. Moylan, E.C./Rudall, P.J./Scotland, R.W Comparative floral anatomy of Strobilanthinae (Acanthaceae), with particular reference to internal partitioning of the flower. Plant Systematics and Evolution. 249: 77–98.	[Requires specialist pollinators? Probably No] "By contrast, in resupinate flowers such as those of Strobilanthes dyeriana with a 3:2 pattern (Fig. 6C, D) and some Asterales such as Lobelia (which also have a 3:2 pattern according to the system of Donoghue et al. 1998), the abaxial and adaxial chambers are reversed in orientation so that the androecium and gynoecium are situated lowermost. As a result, pollination is sternotribic, since pollen is transferred on to the underside of the insect as it is channelled into the upper chamber containing the nectar source. There is an apparent developmental relationship between floral symmetry and resupination, since in some groups resupination appears to compensate for reversals in orientation (e.g. Coen and Nugent 1994, Donoghue et al. 1998, Endress 1999, Rudall and Bateman 2004)." [Insect pollination, but type unknown. Resupinate flowers suggest possible requirement of specialized pollinators]
605	2008. Sharma, M.V./Kuriakose, G./Shivanna, K.R Reproductive strategies of Strobilanthes kunthianus, an endemic, semelparous species in southern Western Ghats, India. Botanical Journal of the Linnean Society. 157: 155–163.	[Requires specialist pollinators? Possibly No] "The reproductive strategies of S. kunthianus were investigated by studying the floral traits, pollination biology, and breeding system that are critical for reproductive success. The species exhibits a series of floral traits: (1) gregarious flowering attracts a large number of Apis cerana indica, the major pollinator; (2) the stigma is sensitive to touch by the pollinator; in fresh flowers, the receptive surface faces the entry path of the incoming bee, facilitating pollen deposition; as an immediate response, the stigma curves backwards moving the receptive surface away from the path of the exiting bee, thus preventing autogamy and interference in pollen transfer; (3) flowers remain fresh for 2 days with receptive stigma and nectar and pollen reward. These traits render the species 100% pollination efficient to ensure a high seed set." [Related species pollinated by bees]
605	2010. Tomlinson, P.B./Zimmerman, M. (eds.). Tropical Trees as Living Systems. Cambridge University Press, Cambridge, UK	[Requires specialist pollinators? Probably No] "Strobilanthes are apparently pollinated by large numbers of highly nomadic honeybee colonies (Apis spp)."
606	2010. Queensland Government. Fact sheet - Pest Plant: Persian shield - Strobilanthes dyerianus (PP114). Dept. of Employment, Economic Development & Innovation, http://www.dpi.qld.gov.au/documents/Biosecurity_ EnvironmentalPests/IPA-Persian-Shield- PP114.pd	[Reproduction by vegetative fragmentation? Yes] "Hand pull seedlings and small plants, ensuring that all stem fragments and roots are removed. Plant pieces should either be bagged and taken to the dump or hung up off the ground to prevent reshooting."
607	2012. Shoot Gardening. Strobilanthes dyeriana (Persian shield). http://www.shootgardening.co.uk/plant/strobilanthes-dyeriana	[Minimum generative time (years)? 4+] "5-10 years to maturity"
701	2012. WRA Specialist. Personal Communication.	[Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)? Unknown" Possible that small seeds may be inadvertently dispersed, but information is lacking
702	2003. Gamrod, E.E Flowering Control and Production of Strobilanthes dyerianus Mast. (Persian Shield). MSc Thesis. Virginia Polytechnic Institute and State University, Blacksburg, VA	[Propagules dispersed intentionally by people? Yes] "Strobilanthes dyerianus Mast., common name Persian Shield, has become a popular and successful ornamental foliage crop in the past few years." "A native of Burma in Southeast Asia, S. dyerianus is grown strictly for its foliage appeal, which is green overlaid with purple; older leaves exhibit a silver hue."
703	2012. WRA Specialist. Personal Communication.	[Propagules likely to disperse as a produce contaminant? No] No evidence, despite popularity in horticulture and as an ornamental
704	2004. Moylan, E.C./Rudall, P.J./Scotland, R.W Comparative floral anatomy of Strobilanthinae (Acanthaceae), with particular reference to internal partitioning of the flower. Plant Systematics and Evolution. 249: 77–98.	[Propagules adapted to wind dispersal? No] "In the Strobilanthinae, the mature ovary (capsule) splits along the abaxial/adaxial axis of the septum where the three cell layers are thinnest, a region termed the 'dissepiment' by Bremekamp (1944)." "In Strobilanthinae, seed dispersal occurs by explosive xerochastic dehiscence of the mature ovary/capsule due to seam failure along the dissepiment."

705	2010. Queensland Government. Fact sheet - Pest Plant: Persian shield - Strobilanthes dyerianus (PP114). Dept. of Employment, Economic Development & Innovation, http://www.dpi.qld.gov.au/documents/Biosecurity_ EnvironmentalPests/IPA-Persian-Shield- PP114.pd	[Propagules water dispersed? Possibly] "Native to Burma, Persian shield was introduced to Queensland as a garden plant. It invades the understorey of rainforest margins and creek lines." [Occurrence along creek lines suggests possible movement by water]
706	2004. Moylan, E.C./Rudall, P.J./Scotland, R.W Comparative floral anatomy of Strobilanthinae (Acanthaceae), with particular reference to internal partitioning of the flower. Plant Systematics and Evolution. 249: 77–98.	[Propagules bird dispersed? No] "In the Strobilanthinae, the mature ovary (capsule) splits along the abaxial/adaxial axis of the septum where the three cell layers are thinnest, a region termed the 'dissepiment' by Bremekamp (1944)." "In Strobilanthinae, seed dispersal occurs by explosive xerochastic dehiscence of the mature ovary/capsule due to seam failure along the dissepiment."
707	2004. Moylan, E.C./Rudall, P.J./Scotland, R.W Comparative floral anatomy of Strobilanthinae (Acanthaceae), with particular reference to internal partitioning of the flower. Plant Systematics and Evolution. 249: 77–98.	[Propagules dispersed by other animals (externally)? No] "In the Strobilanthinae, the mature ovary (capsule) splits along the abaxial/adaxial axis of the septum where the three cell layers are thinnest, a region termed the 'dissepiment' by Bremekamp (1944)." "In Strobilanthinae, seed dispersal occurs by explosive xerochastic dehiscence of the mature ovary/capsule due to seam failure along the dissepiment." [No evidence]
708	2012. WRA Specialist. Personal Communication.	[Propagules survive passage through the gut? Unknown] Seeds, if produced, unlikely to be ingested.
801	2000. Whistler, W.A Tropical Ornamentals: A Guide. Timber Press, Portland, OR	[Prolific seed production (>1000/m2)? No] "Fruit a spindle-shaped capsule, infrequently formed in cultivation."
802	2008. Royal Botanic Gardens Kew. Seed Information Database (SID). Version 7.1. http://data.kew.org/sid/	[Evidence that a persistent propagule bank is formed (>1 yr)? Unknown] 0 records found.
803	2010. Queensland Government. Fact sheet - Pest Plant: Persian shield - Strobilanthes dyerianus (PP114). Dept. of Employment, Economic Development & Innovation, http://www.dpi.qld.gov.au/documents/Biosecurity_ EnvironmentalPests/IPA-Persian-Shield- PP114.pd	[Well controlled by herbicides? Unknown] "It is important to note that specific research on the use of herbicides to control Persian shield has not been undertaken to date. Therefore, the treatment options outlined in Table 1 are suggestions only, based on registered controls for similar weeds in non agricultural areas and the specifications of PER11463. As such, their effectiveness cannot be guaranteed." "Spot spray Glyphosate (360 g/L) 1 L per 100 L water"
804	1987. Clay, H.F./Hubbard, J.C The Hawaii Garden: Tropical Shrubs. University of Hawaii Press, Honolulu, HI	[Tolerates, or benefits from, mutilation, cultivation, or fire? Yes] "Prune to induce new growth and foliage and to make a more compact plant."
804	2010. Queensland Government. Fact sheet - Pest Plant: Persian shield - Strobilanthes dyerianus (PP114). Dept. of Employment, Economic Development & Innovation, http://www.dpi.qld.gov.au/documents/Biosecurity_ EnvironmentalPests/IPA-Persian-Shield- PP114.pd	[Tolerates, or benefits from, mutilation, cultivation, or fire? Yes] "Hand pull seedlings and small plants, ensuring that all stem fragments and roots are removed. Plant pieces should either be bagged and taken to the dump or hung up off the ground to prevent reshooting."
805	2012. WRA Specialist. Personal Communication.	[Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown]