

Family: *Ranunculaceae*

Taxon: *Anemone hupehensis*

Synonym: *Anemone hupehensis* var. *japonica* (Thunb.) E
Anemone japonica (Thunb.) Siebold & Zucc.

Common Name: anemone
Japanese anemone
hupeh anemone

Questionnaire :	current 20090513	Assessor:	Patti Clifford	Designation: H(HPWRA)
Status:	Assessor Approved	Data Entry Person:	Patti Clifford	WRA Score 8.5
101	Is the species highly domesticated?		y=-3, n=0	n
102	Has the species become naturalized where grown?		y=1, n=-1	
103	Does the species have weedy races?		y=1, n=-1	
201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"		(0-low; 1-intermediate; 2-high) (See Appendix 2)	Low
202	Quality of climate match data		(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
203	Broad climate suitability (environmental versatility)		y=1, n=0	y
204	Native or naturalized in regions with tropical or subtropical climates		y=1, n=0	y
205	Does the species have a history of repeated introductions outside its natural range?		y=-2, ?=-1, n=0	y
301	Naturalized beyond native range		y = 1*multiplier (see Appendix 2), n= question 205	y
302	Garden/amenity/disturbance weed		n=0, y = 1*multiplier (see Appendix 2)	n
303	Agricultural/forestry/horticultural weed		n=0, y = 2*multiplier (see Appendix 2)	n
304	Environmental weed		n=0, y = 2*multiplier (see Appendix 2)	y
305	Congeneric weed		n=0, y = 1*multiplier (see Appendix 2)	n
401	Produces spines, thorns or burrs		y=1, n=0	n
402	Allelopathic		y=1, n=0	
403	Parasitic		y=1, n=0	n
404	Unpalatable to grazing animals		y=1, n=-1	y
405	Toxic to animals		y=1, n=0	y
406	Host for recognized pests and pathogens		y=1, n=0	
407	Causes allergies or is otherwise toxic to humans		y=1, n=0	y
408	Creates a fire hazard in natural ecosystems		y=1, n=0	n
409	Is a shade tolerant plant at some stage of its life cycle		y=1, n=0	y
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)		y=1, n=0	n

411	Climbing or smothering 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, corms, or tubers)	y=1, n=0	y
601	Evidence of substantial reproductive failure in native habitat	y=1, n=0	
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	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	y
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	3
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	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	y
705	Propagules water dispersed	y=1, n=-1	n
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	
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	
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	y=-1, n=1	

Designation: H(HPWRA)

WRA Score **8.5**

Supporting Data:

101	2010. WRA Specialist. Personal Communication.	No evidence of domestication.
201	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Bethesda, Maryland	Native to: Temperate Asia - China; Taiwan
202	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Bethesda, Maryland	Native to: Temperate Asia - China; Taiwan
203	2010. Dave's Garden. Japanese Windflower, Japanese Anemone, Japanese Thimbleflower <i>Anemone hupehensis</i> . Dave's Garden, http://davesgarden.com/guides/pf/go/535/	USDA Zones 4-8
203	2010. eFloras.org. Chinese plant names <i>Anemone hupehensis</i> Lem. Missouri Botanical Gardens, http://www.efloras.org/florataxon.aspx?flora_id=3&taxon_id=200007452	Scrub, grassy slopes, streamsides in hilly regions, sometimes cultivated or becoming naturalized; 400--2600 m. Native in N Guangdong, N Guangxi, Guizhou, W Hubei, Jiangxi, S Shaanxi, Sichuan, Taiwan, Yunnan, and E Zhejiang (Tiantai Shan); cultivated or naturalized (var. japonica) in Anhui, Fujian, Guangdong, Jiangsu, Jiangxi, Yunnan, and Zhejiang.
203	2010. Missouri Botanical Garden. Kenter Center for home gardening <i>Anemone hupehensis</i> . Missouri Botanical Garden, http://www.mobot.org/GARDENINGHELP/PLANTFINDER/plant.asp?code=H310	USDA Zones: 4-8
204	1980. Taylor, D.. Controlling exotic plants in Hawaii Volcanoes National Park. http://www.botany.hawaii.edu/faculty/duffy/speci/3rd/55.pdf	<i>Anemone hupehensis</i> is an exotic species that has invaded Hawaii Volcanoes National Park. Control methods are being pursued in some areas. The control areas are not identified in this report. <i>Anemone</i> is a concern because it 'causes significant disruption of native plant and/or animal communities or they seriously detract from the natural landscape.'
204	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Bethesda, Maryland	Naturalized in Japan
205	1923. Grier, N.M./Grier, C.R.. A list of plants growing under cultivation in the vicinity of Cold Spring Harbor, New York. <i>American Midland Naturalist</i> . 11: 307-387.	<i>Anemone hupehensis</i> was described as growing under cultivation in New York, USA in 1928.
205	1980. Taylor, D.. Controlling exotic plants in Hawaii Volcanoes National Park. http://www.botany.hawaii.edu/faculty/duffy/speci/3rd/55.pdf	<i>Anemone hupehensis</i> is an exotic species that has invaded Hawaii Volcanoes National Park. Control methods are being pursued in some areas. The control areas are not identified in this report. <i>Anemone</i> is a concern because it 'causes significant disruption of native plant and/or animal communities or they seriously detract from the natural landscape.'
205	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Bethesda, Maryland	Cultivated and naturalized in Japan
301	1980. Taylor, D.. Controlling exotic plants in Hawaii Volcanoes National Park. http://www.botany.hawaii.edu/faculty/duffy/speci/3rd/55.pdf	<i>Anemone hupehensis</i> is an exotic species that has invaded Hawaii Volcanoes National Park. Control methods are being pursued in some areas. The control areas are not identified in this report. <i>Anemone</i> is a concern because it 'causes significant disruption of native plant and/or animal communities or they seriously detract from the natural landscape.'
301	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Bethesda, Maryland	Naturalized in Japan
302	2007. Randall, R.P.. Global Compendium of Weeds. http://www.hear.org/gcw/	No evidence.

303	2007. Randall, R.P.. Global Compendium of Weeds. http://www.hear.org/gcw/	No evidence of agricultural/forestry/horticultural weed.
304	1980. Taylor, D.. Controlling exotic plants in Hawaii Volcanoes National Park. http://www.botany.hawaii.edu/faculty/duffy/speci/3rd/55.pdf	Anemone hupehensis is an exotic species that has invaded Hawaii Volcanoes National Park. Control methods are being pursued in some areas. The control areas are not identified in this report. Anemone is a concern because it 'causes significant disruption of native plant and/or animal communities or they seriously detract from the natural landscape.'
305	2007. Randall, R.P.. Global Compendium of Weeds. http://www.hear.org/gcw/	No evidence. However see source for naturalized species in the genus.
401	1999. Wagner, W. L./Herbst, D. R./Sohmer, S. H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	"Erect perennial herbs; stems 0.5-1.5 m long, appressed pilose. Basal leaves ternately compound, leaflets ovate, 4-20 cm long, 5-15 cm wide, upper surface green, sparsely strigose, lower surface pale green, appressed pilose, primarily along veins, toothed and lobed, base cordate. Sepals 5-20, white, often tinged pink or purple, lower surface velvety pubescent. Achenes numerous in a globose head, ca 2 mm long, long-pilose"
402	2010. WRA Specialist. Personal Communication.	Unknown.
403	1999. Wagner, W. L./Herbst, D. R./Sohmer, S. H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	"Erect perennial herbs; stems 0.5-1.5 m long, appressed pilose. Basal leaves ternately compound, leaflets ovate, 4-20 cm long, 5-15 cm wide, upper surface green, sparsely strigose, lower surface pale green, appressed pilose, primarily along veins, toothed and lobed, base cordate. Sepals 5-20, white, often tinged pink or purple, lower surface velvety pubescent. Achenes numerous in a globose head, ca 2 mm long, long-pilose" [not parasitic]
404	2000. Scott, S./Thomas, C.. Poisonous Plants of Hawaii. University of Hawaii Press, Honolulu	All parts of the plant contain a toxin that causes blisters to the skin and mucous membranes. The toxins are most concentrated when the plant is flowering. Poisoning is rare as the taste of the plant is bad and painful. If swallowed intense vomiting occurs.
404	2010. Herbarium selection of species from European flora. Anemone nemorosa L. Anemone (Wood Anemone - Windflower - European Thimbleweed - Smell Fox). Herbarium selection of species from European flora, http://herbarium.freehostia.com/plant.php?latin=Anemone	All Ranunculaceae are toxic, one speaks about cursed family. All the plant is extremely acidness, so well no animal never eats them. This species contains same toxins as all the other Anemones, causing violent muscular contractions, bloody colics, respiratory and cardiac disorders.
404	2010. Missouri Botanical Garden. Kenter Center for home gardening Anemone hupehensis. Missouri Botanical Garden, http://www.mobot.org/GARDENINGHELP/PLANTFINDER/plant.asp?code=H310	Resistant to deer browsing.
405	2010. Herbarium selection of species from European flora. Anemone nemorosa L. Anemone (Wood Anemone - Windflower - European Thimbleweed - Smell Fox). Herbarium selection of species from European flora, http://herbarium.freehostia.com/plant.php?latin=Anemone	All Ranunculaceae are toxic, one speaks about cursed family. All the plant is extremely acidness, so well no animal never eats them. This species contains same toxins as all the other Anemones, causing violent muscular contractions, bloody colics, respiratory and cardiac disorders.
406	2002. Schmid, W.G.. An encyclopedia of shade perennials. Timber Press, Portland http://books.google.com/books?id=oKVzZdgB-QEC&pg=PA73&dq=anemone+hupehensis&lr=&f=false	[Unknown] Anemones are prone to develop leaf galls, leaf spot or leaf smut. Powdery mildew is common. Late-blooming anemones are subject to foliar and root nematodes.
407	2000. Scott, S./Thomas, C.. Poisonous Plants of Hawaii. University of Hawaii Press, Honolulu	All parts of the plant contain a toxin that causes blisters to the skin and mucous membranes. The toxins are most concentrated when the plant is flowering. Poisoning is rare as the taste of the plant is bad and painful. If swallowed intense vomiting occurs.
408	2010. WRA Specialist. Personal Communication.	No evidence.

409	2002. Schmid, W.G.. An encyclopedia of shade perennials. Timber Press, Portland http://books.google.com/books?id=oKVsZdgB-QEC&pg=PA73&dq=anemone+hupehensis&lr=&ei=guKSSuTeFKWQkAT12-GmBw#v=onepage&q=anemone%20hupehensis&f=false	Anemone species are shade lovers.
409	2010. Dave's Garden. Japanese Windflower, Japanese Anemone, Japanese Thimbleflower Anemone hupehensis. Dave's Garden, http://davesgarden.com/guides/pf/go/535/	Sun to part shade.
409	2010. Missouri Botanical Garden. Kenter Center for home gardening Anemone hupehensis. Missouri Botanical Garden, http://www.mobot.org/GARDENINGHELP/PLANTFINDER/plant.asp?code=H310	Sun to part shade. Prefers part shade.
410	2010. Dave's Garden. Japanese Windflower, Japanese Anemone, Japanese Thimbleflower Anemone hupehensis. Dave's Garden, http://davesgarden.com/guides/pf/go/535/	Soil pH requirements: 4.6 to 5.0 (highly acidic), 5.1 to 5.5 (strongly acidic), 5.6 to 6.0 (acidic).
411	2010. Missouri Botanical Garden. Kenter Center for home gardening Anemone hupehensis. Missouri Botanical Garden, http://www.mobot.org/GARDENINGHELP/PLANTFINDER/plant.asp?code=H310	Herbaceous perennial.
412	2010. WRA Specialist. Personal Communication.	Unknown.
501	2010. Missouri Botanical Garden. Kenter Center for home gardening Anemone hupehensis. Missouri Botanical Garden, http://www.mobot.org/GARDENINGHELP/PLANTFINDER/plant.asp?code=H310	Terrestrial.
502	2010. Missouri Botanical Garden. Kenter Center for home gardening Anemone hupehensis. Missouri Botanical Garden, http://www.mobot.org/GARDENINGHELP/PLANTFINDER/plant.asp?code=H310	Ranunculaceae
503	2010. Missouri Botanical Garden. Kenter Center for home gardening Anemone hupehensis. Missouri Botanical Garden, http://www.mobot.org/GARDENINGHELP/PLANTFINDER/plant.asp?code=H310	Herbaceous perennial.
504	2010. Wilken, D.H.. Ranunculaceae Buttercup Family Jepson Flora Project: Jepson Interchange. University of California, Citation: http://ucjeps.berkeley.edu/interchange/l_treat_index.html Tue Oct 19 12:08:30 2010	Anemone: perennial from stout, simple to branched caudex, rhizome or tuber.
601	2010. WRA Specialist. Personal Communication.	No evidence.
602	2010. Dave's Garden. Japanese Windflower, Japanese Anemone, Japanese Thimbleflower Anemone hupehensis. Dave's Garden, http://davesgarden.com/guides/pf/go/535/	Propagated by seed or dividing the rootball.
603	2002. Schmid, W.G.. An encyclopedia of shade perennials. Timber Press, Portland http://books.google.com/books?id=oKVsZdgB-QEC&pg=PA73&dq=anemone+hupehensis&lr=&ei=guKSSuTeFKWQkAT12-GmBw#v=onepage&q=anemone%20hupehensis&f=false	[Unknown] Anemone hupehensis is the genetic basis for many flowering Anemone cultivars.
604	2008. Keasar, T./Shmida, A./Sylbertal, A.. Pollination ecology of the red Anemone coronaria (Ranunculaceae): honeybees may select for early flowering.	[Unknown.] Anemone coronaria is not self-compatible.

605	2008. Keasar, T./Shmida, A./Sylbertal, A.. Pollination ecology of the red <i>Anemone coronaria</i> (Ranunculaceae): honeybees may select for early flowering.	<i>Anemone coronaria</i> is pollinated by honeybees and glaphyrid beetles. [similar species]
606	2002. Schmid, W.G.. An encyclopedia of shade perennials. Timber Press, Portland http://books.google.com/books?id=oKVsZdgB-QEC&pg=PA73&dq=anemone+hupehensis&lr=&ei=guKSSuTeFKWQkAT12-GmBw#v=onepage&q=anemone%20hupehensis&f=false	Plant with suckering, fibrous rootstock.
606	2010. Dave's Garden. Japanese Windflower, Japanese Anemone, Japanese Thimbleflower <i>Anemone hupehensis</i> . Dave's Garden, http://davesgarden.com/guides/pf/go/535/	Propagated by seed or dividing the rootball.
607	2003. Viette, A./Viette, M./Heriteau, J.. Mid-Atlantic gardener's guide. Cool Springs Press, Franklin http://books.google.com/books?id=zwKKfrpPJksC&dq=japanese+anemone&lr=&source=gbs_navlink_s	Plants need two or three seasons to become established.
701	2010. WRA Specialist. Personal Communication.	Unknown.
702	1923. Grier, N.M./Grier, C.R.. A list of plants growing under cultivation in the vicinity of Cold Spring Harbor, New York. American Midland Naturalist. 11: 307-387.	<i>Anemone hupehensis</i> was described as growing under cultivation in New York, USA in 1928.
702	1980. Taylor, D.. Controlling exotic plants in Hawaii Volcanoes National Park. http://www.botany.hawaii.edu/faculty/duffy/speci3rd/55.pdf	<i>Anemone hupehensis</i> is an exotic species that has invaded Hawaii Volcanoes National Park. Control methods are being pursued in some areas. The control areas are not identified in this report. <i>Anemone</i> is a concern because it 'causes significant disruption of native plant and/or animal communities or they seriously detract from the natural landscape.'
702	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Bethesda, Maryland	Naturalized in Japan
703	2010. WRA Specialist. Personal Communication.	Not grown in produce or hay.
704	2007. Pacific Islands Ecosystems at Risk (PIER). <i>Anemone hupehensis</i> (Lemoine) Lemoine, Ranunculaceae. http://www.hear.org/pier/species/anemone_hupehensis.htm	Wind dispersed seeds.
705	2007. Pacific Islands Ecosystems at Risk (PIER). <i>Anemone hupehensis</i> (Lemoine) Lemoine, Ranunculaceae. http://www.hear.org/pier/species/anemone_hupehensis.htm	[No adaptation for water dispersal] Wind distributed seeds.
706	2007. Pacific Islands Ecosystems at Risk (PIER). <i>Anemone hupehensis</i> (Lemoine) Lemoine, Ranunculaceae. http://www.hear.org/pier/species/anemone_hupehensis.htm	Wind distributed seeds.
707	2007. Pacific Islands Ecosystems at Risk (PIER). <i>Anemone hupehensis</i> (Lemoine) Lemoine, Ranunculaceae. http://www.hear.org/pier/species/anemone_hupehensis.htm	Wind dispersed seeds.
708	2010. WRA Specialist. Personal Communication.	Unknown.
801	2010. WRA Specialist. Personal Communication.	Unknown.

802	2008. Loh, R.K./Daehler, C.C.. Influence of woody invader control methods and seed availability on native and invasive species establishment in a Hawaiian forest. <i>Biological Invasions</i> . 10: 805-819.	[Unknown] <i>Anemone hupehensis</i> was detected in the seed bank in the first year of an experiment that assessed the impacts of invasive woody plants on the recruitment of native species in plant communities in Hawaii.
803	2010. WRA Specialist. Personal Communication.	Unknown.
804	2010. WRA Specialist. Personal Communication.	Unknown.
805	2010. WRA Specialist. Personal Communication.	Unknown.
