

Assessment date 23 July 2015

<i>Ipomoea setosa</i> North		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)	1	
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	unk	
3.03	Weed of agriculture	unk	
3.04	Environmental weed	unk	
3.05	Congeneric weed	y	2
4.01	Produces spines, thorns or burrs	y	1
4.02	Allelopathic	unk	0
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals	n	-1
4.05	Toxic to animals	unk	0
4.06	Host for recognised pests and pathogens	n	0
4.07	Causes allergies or is otherwise toxic to humans	unk	0
4.08	Creates a fire hazard in natural ecosystems	unk	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	unk	0
4.12	Forms dense thickets	unk	0
5.01	Aquatic	n	0
5.02	Grass	n	0
5.03	Nitrogen fixing woody plant	n	0
5.04	Geophyte	n	0
6.01	Evidence of substantial reproductive failure in native habitat	n	0
6.02	Produces viable seed	y	1

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

section	# questions answered	satisfy minimum?
A		8 yes
B		5 yes
C		10 yes
total		23 yes

Assessment date 23 July 2015

<i>Ipomoea setosa</i> Central South		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	unk	
3.03	Weed of agriculture	unk	
3.04	Environmental weed	unk	
3.05	Congeneric weed	y	2
4.01	Produces spines, thorns or burrs	y	1
4.02	Allelopathic	unk	0
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals	n	-1
4.05	Toxic to animals	unk	0
4.06	Host for recognised pests and pathogens	n	0
4.07	Causes allergies or is otherwise toxic to humans	unk	0
4.08	Creates a fire hazard in natural ecosystems	unk	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	unk	0
4.12	Forms dense thickets	unk	0
5.01	Aquatic	n	0
5.02	Grass	n	0
5.03	Nitrogen fixing woody plant	n	0
5.04	Geophyte	n	0
6.01	Evidence of substantial reproductive failure in native habitat	n	0
6.02	Produces viable seed	y	1

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

section	# questions answered	satisfy minimum?
A		8 yes
B		5 yes
C		10 yes
total		23 yes

	Reference	Source data
1.01		No evidence of selection for reduced weediness
1.02		Skip to question 2.01
1.03		Skip to question 2.01
2.01	1. PERAL NAPPFAST Global Plant Hardiness. <a href="http://www.nappfast.org/Plant_hardiness/2012/PHZ%20update201230%20yr%20%20300dpi.tif">http://www.nappfast.org/Plant_hardiness/2012/PHZ%20update201230%20yr%20%20300dpi.tif</a> (Accessed: 16 July 2015) 2. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/106134/">http://davesgarden.com/guides/pf/go/106134/</a> (Accessed: 16 July 2015) 3. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20223">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20223</a> (Accessed: 16 July 2015)	No computer analysis was performed. 1. Florida North Zone: Hardiness zones 8 and 9. Central Zone: Hardiness zones 9 and 10. South Zone: Hardiness zone 10. 2. Found in USDA Hardiness Zones 9 and 10. 3. Native to Mexico, Belize, Costa Rica, Guatemala, Nicaragua, Panama, Brazil, Ecuador, Peru, and Argentina.
2.02		No computer analysis was performed. Native range is well known. Hardiness zone 9 only accounts for part of the North Zone. Refer to 2.01 source data.
2.03	1. The University of Melbourne. Köppen-Geiger Climate Map of the World. <a href="http://people.eng.unimelb.edu.au/mpeel/koppen.html">http://people.eng.unimelb.edu.au/mpeel/koppen.html</a> (Accessed: 16 July 2015) 2. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20223">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20223</a> (Accessed: 16 July 2015)	1. Native to the following Köppen-Geiger Climate Zones: Am, Aw, BWh, BSh, BSk, Cwa, Cwb, Cfa, Cfb. 2. Native to Mexico, Belize, Costa Rica, Guatemala, Nicaragua, Panama, Brazil, Ecuador, Peru, and Argentina.
2.04	1. Climate Charts. World Climate Maps. <a href="http://www.climate-charts.com/World-Climate-Maps.html#rain">http://www.climate-charts.com/World-Climate-Maps.html#rain</a> (Accessed: 16 July 2015)	1. Native to areas with rainfall in this range.
2.05	1. Checklist of Plants of Mississippi. <a href="https://www.mdwfp.com/media/128993/exotic_plants_checklist.pdf">https://www.mdwfp.com/media/128993/exotic_plants_checklist.pdf</a> (Accessed: 17 July 2015) 2. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/106134/#b">http://davesgarden.com/guides/pf/go/106134/#b</a> (Accessed: 17 July 2015)	1. Documented introduction to Mississippi 2. "This plant has been said to grow in the following regions: Alabama, California, Florida, Hawaii, Kansas, Kentucky, Louisiana, Oregon, Pennsylvania, Tennessee, and Texas"
3.01	1. Flora of China. <a href="http://www.tropicos.org/Name/8500742?projectid=8">http://www.tropicos.org/Name/8500742?projectid=8</a> (Accessed: 21 July 2015) 2. Inventory, Plant Material Introduced. <a href="https://books.google.com/books?id=8LIHAQAAMAAJ&amp;pg=RA5-PA13&amp;lpg=RA5-PA13&amp;dq=%22Ipomoea+setosa%22+naturalized&amp;source=bl&amp;ots=Isx-agOXyy&amp;sig=ySQeZALdfEDv-atfBkONY2Ht9Ek&amp;hl=en&amp;sa=X&amp;ved=0CCQQ6AEwAmoVChMI7KLGovnsxglVQx0eCh1zwmwky#v=onepage&amp;q=%22Ipomoea%20setosa%22%20naturalized&amp;f=false">https://books.google.com/books?id=8LIHAQAAMAAJ&amp;pg=RA5-PA13&amp;lpg=RA5-PA13&amp;dq=%22Ipomoea+setosa%22+naturalized&amp;source=bl&amp;ots=Isx-agOXyy&amp;sig=ySQeZALdfEDv-atfBkONY2Ht9Ek&amp;hl=en&amp;sa=X&amp;ved=0CCQQ6AEwAmoVChMI7KLGovnsxglVQx0eCh1zwmwky#v=onepage&amp;q=%22Ipomoea%20setosa%22%20naturalized&amp;f=false</a> (Accessed: 21 July 2015) 3. HEAR. Global Compendium of Weeds. <a href="http://www.hear.org/gcw/species/ipomoea_setosa/">http://www.hear.org/gcw/species/ipomoea_setosa/</a> (Accessed: 21 July 2015)	1. "Status: naturalized, cultivated (China)" 2. "also found in Jamaica, probably introduced" 3. "Status: Naturalised"
3.02		No evidence
3.03		No evidence
3.04		No evidence

3.05	1. A Geographical Atlas of World Weeds. Kreiger Publishing Company. (Holm, Pancho, Herberger, Plucknett, 1991) (Accessed: 16 July 2015)	1. Ipomoea acuminata, Ipomoea alba, Ipomoea amoena, Ipomoea angustifolia, Ipomoea aquatica, Ipomoea asperifolia, Ipomoea barbigera, Ipomoea batatas, Ipomoea blepharosepala, Ipomoea cairica, Ipomoea calobra, Ipomoea caloneura, Ipomoea cardiosepala, Ipomoea chryseides, Ipomoea coccinea, Ipomoea congesta, Ipomoea cordofana, Ipomoea coscinosperma, Ipomoea crassifolia, Ipomoea cymosa, Ipomoea cynanchifolia, Ipomoea eriocarpa, Ipomoea fistulosa, Ipomoea gossypoides, Ipomoea gracilis, Ipomoea hardwickii, Ipomoea herderacea, Ipomoea hederifolia, Ipomoea hisutula, Ipomoea indivisa, Ipomoea involucrata, Ipomoea lacunosa, Ipomoea leari, Ipomoea mulleri, Ipomoea nil, Ipomoea obscura, Ipomoea pandurata, Ipomoea pes-caprae, Ipomoea pes-tigridis, Ipomoea plebeia, Ipomoea polyantha, Ipomoea purpurea, Ipomoea quamoclit, Ipomoea setifera, Ipomoea stolonifera, Ipomoea tiliacea, Ipomoea trichocarpa, Ipomoea trifida, Ipomoea triloba, and Ipomoea tuboides are all listed as weeds.
4.01	1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/106134/#b">http://davesgarden.com/guides/pf/go/106134/#b</a> (Accessed: 17 July 2015)	1. "Plant has spines or sharp edges; use extreme caution when handling" Photo evidence in file
4.02		No evidence
4.03		No evidence
4.04	1. Discover Life ( <a href="http://www.discoverlife.org/mp/20q?search=Ipomoea+setosa">http://www.discoverlife.org/mp/20q?search=Ipomoea+setosa</a> [accessed 7/22/2015])	Food Source Large & small Mammals, water birds, terrestrial birds
4.05	1. B&T World Seeds. <a href="https://b-and-t-world-seeds.com/cartall.asp?species=Ipomoea%20setosa&amp;sref=454283">https://b-and-t-world-seeds.com/cartall.asp?species=Ipomoea%20setosa&amp;sref=454283</a> (Accessed: 21 July 2015) 2. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/106134/#b">http://davesgarden.com/guides/pf/go/106134/#b</a> (Accessed: 21 July 2015)	1. "Parts of Ipomoea setosa are considered toxic." 2. "Seed is poisonous if ingested; Parts of plant are poisonous if ingested; All parts of plant are poisonous if ingested" --- unknown if toxic to animals or only humans
4.06		No evidence that the taxon is a significant primary or alternate host.
4.07		No evidence
4.08	1. B&T World Seeds. <a href="https://b-and-t-world-seeds.com/cartall.asp?species=Ipomoea%20setosa&amp;sref=454283">https://b-and-t-world-seeds.com/cartall.asp?species=Ipomoea%20setosa&amp;sref=454283</a> (Accessed: 21 July 2015)	1. "Ipomoea setosa is included in the following B and T World Seeds flowing plant categories... 720: Fire Resistant Plants"
4.09	1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/106134/#b">http://davesgarden.com/guides/pf/go/106134/#b</a> (Accessed: 17 July 2015)	1. "Sun Exposure: Full Sun to Partial Shade"
4.10		No evidence
4.11	1. B&T World Seeds. <a href="https://b-and-t-world-seeds.com/cartall.asp?species=Ipomoea%20setosa&amp;sref=454283">https://b-and-t-world-seeds.com/cartall.asp?species=Ipomoea%20setosa&amp;sref=454283</a> (Accessed: 21 July 2015)	1. "Ipomoea setosa is included in the following B and T World Seeds flowing plant categories... 39: Climbing Plant Seeds" --- insufficient evidence
4.12	1. Flora of China. <a href="http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=210000744">http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=210000744</a> (Accessed: 21 July 2015)	1. "Dense forests or thickets in valleys" --- insufficient evidence; unclear whether the plant grows in thickets in valleys or forms them
5.01		No evidence
5.02	1. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20223">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20223</a> (Accessed: 21 July 2015)	1. "Family: Convolvulaceae"

5.03	1. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20223">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20223</a> (Accessed: 21 July 2015)	1. "Family: Convolvulaceae"
5.04		No evidence of specialized organs
6.01		No evidence found of substantial reproductive failure
6.02	1. USDA Plants Database. <a href="http://plants.usda.gov/core/profile?symbol=IPSE3">http://plants.usda.gov/core/profile?symbol=IPSE3</a> (Accessed: 21 July 2015) 2. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/106134/#b">http://davesgarden.com/guides/pf/go/106134/#b</a> (Accessed: 21 July 2015) 3. UC IPM ( <a href="http://www.ipm.ucdavis.edu/PMG/WEEDS/morningglories.html">http://www.ipm.ucdavis.edu/PMG/WEEDS/morningglories.html</a> [accessed 7/22/2015])	1. See photo of seeds 2. "Propagation Methods: From herbaceous stem cuttings; From seed; sow indoors before last frost; From seed; direct sow after last frost; Scarify seed before sowing 3. Ipomoea species reproduce by seed
6.03		No evidence
6.04	1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/106134/#b">http://davesgarden.com/guides/pf/go/106134/#b</a> (Accessed: 21 July 2015)	1. "Self-sows freely; deadhead if you do not want volunteer seedlings next season"
6.05	1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/106134/#b">http://davesgarden.com/guides/pf/go/106134/#b</a> (Accessed: 21 July 2015)	1. "This plant is attractive to bees, butterflies and/or birds" --- typically these insects are generalist pollinators
6.06	1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/106134/#b">http://davesgarden.com/guides/pf/go/106134/#b</a> (Accessed: 21 July 2015)	1. Propagation Methods: From herbaceous stem cuttings" --- no evidence of this occurring naturally
6.07		No evidence
7.01		No evidence
7.02	1. Georgia Vines. <a href="http://www.georgiavines.com/cart/index.php?main_page=product_info&amp;products_id=1740">http://www.georgiavines.com/cart/index.php?main_page=product_info&amp;products_id=1740</a> (Accessed: 17 July 2015)	1. Seeds sold online. Described as: "A vigorous grower with huge deep pink blossoms that produced tons of blossoms off and on all summer"
7.03		No evidence
7.04	1. USDA Plants Database. <a href="http://plants.usda.gov/core/profile?symbol=IPSE3">http://plants.usda.gov/core/profile?symbol=IPSE3</a> (Accessed: 21 July 2015)	No evidence, however 1. seed does not have traits indicating wind dispersal (see photo)
7.05		No evidence
7.06	1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/106134/#b">http://davesgarden.com/guides/pf/go/106134/#b</a> (Accessed: 21 July 2015)	1. "This plant is attractive to bees, butterflies and/or birds" --- insufficient evidence
7.07		No evidence
7.08		No evidence
8.01		No evidence
8.02	1. UC IPM ( <a href="http://www.ipm.ucdavis.edu/PMG/WEEDS/morningglories.html">http://www.ipm.ucdavis.edu/PMG/WEEDS/morningglories.html</a> [accessed 7/22/2015])	Not enough evidence. Likely: Ipomoea seeds remain viable in soil for long periods.
8.03		No evidence
8.04		No evidence
8.05		No evidence