

Assessment date 25 June 2015

<i>Passiflora coccinea</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	0	
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	1
3.02	Garden/amenity/disturbance weed	y	1
3.03	Weed of agriculture	n	0
3.04	Environmental weed	unk	
3.05	Congeneric weed	y	1
4.01	Produces spines, thorns or burrs	n	0
4.02	Allelopathic	unk	0
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals	unk	-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	n	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	y	1
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	?	
6.05	Requires specialist pollinators	n	0
6.06	Reproduction by vegetative propagation	?	
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	n	-1
7.04	Propagules adapted to wind dispersal	n	-1
7.05	Propagules water dispersed	unk	-1
7.06	Propagules bird dispersed	unk	-1
7.07	Propagules dispersed by other animals (externally)	n	-1
7.08	Propagules dispersed by other animals (internally)	unk	-1
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		?	
Total Score			-4
Implemented Pacific Second Screening			no
Risk Assessment Results			Low

section	# questions answered	satisfy minimum?
A		10 yes
B		6 yes
C		11 yes
total		27 yes

Assessment date 25 June 2015

<i>Passiflora coccinea</i> Central		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	y	2
3.03	Weed of agriculture	n	0
3.04	Environmental weed	unk	
3.05	Congeneric weed	y	2
4.01	Produces spines, thorns or burrs	n	0
4.02	Allelopathic	unk	0
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals	unk	-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	n	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	y	1
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	?	
6.05	Requires specialist pollinators	n	0
6.06	Reproduction by vegetative propagation	?	
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	n	-1
7.04	Propagules adapted to wind dispersal	n	-1
7.05	Propagules water dispersed	unk	-1
7.06	Propagules bird dispersed	unk	-1
7.07	Propagules dispersed by other animals (externally)	n	-1
7.08	Propagules dispersed by other animals (internally)	unk	-1
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		?	
Total Score			-1
Implemented Pacific Second Screening			no
Risk Assessment Results			Low

section	# questions answered	satisfy minimum?
A		10 yes
B		6 yes
C		11 yes
total		27 yes

Assessment date 25 June 2015

<i>Passiflora coccinea</i> 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	y	2
3.03	Weed of agriculture	n	0
3.04	Environmental weed	unk	
3.05	Congeneric weed	y	2
4.01	Produces spines, thorns or burrs	n	0
4.02	Allelopathic	unk	0
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals	unk	-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	n	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	y	1
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	?	
6.05	Requires specialist pollinators	n	0
6.06	Reproduction by vegetative propagation	?	
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	n	-1
7.04	Propagules adapted to wind dispersal	n	-1
7.05	Propagules water dispersed	unk	-1
7.06	Propagules bird dispersed	unk	-1
7.07	Propagules dispersed by other animals (externally)	n	-1
7.08	Propagules dispersed by other animals (internally)	unk	-1
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		?	
Total Score			-1
Implemented Pacific Second Screening			no
Risk Assessment Results			Low

section	# questions answered	satisfy minimum?
A		10 yes
B		6 yes
C		11 yes
total		27 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. http://www.nappfast.org/Plant_hardiness/2012/PHZ%20update201230%20yr%20%20300dpi.tif (Accessed: 21 July 2015) 2. Dave's Garden. http://davesgarden.com/guides/pf/go/1558/#b (Accessed: 21 July 2015) 3. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?26955 (Accessed: 21 July 2015) 4. Global Biodiversity Information Facility. http://www.gbif.org/species/2874176 (Accessed: 21 July 2015)	No computer analysis was performed. 1. Florida North Zone: Hardiness zones 8 and 9. Central Zone: Hardiness zones 9 and 10. 2. <i>Passiflora coccinea</i> is located in USDA Global Hardiness Zones 10 and 11. 3. Native to: French Guiana, Guyana, Suriname, Venezuela, and Brazil. 4. See map. Peru, Haiti (introduced), Dominican Republic (introduced), Guyana, Surinam, French Guiana, Bolivia, Venezuela (Amazonas, Bolivar, Delta Amacuro), Colombia, N-Brazil (Roraima, Amapa, Para, Amazonas, Acre, Rondonia), NE-Brazil (Piaui, Bahia), WC-Brazil (Mato Grosso), USA (introduced) (Florida (introduced)); Additional Location Displayed on Map: Australia, China, New Caledonia, United States (Missouri, Connecticut), Honduras, Costa Rica, Ghana
2.02		No computer analysis was performed. Native range is well known. Hardiness Zone 10 & 11 accounts for none of North, part of the Central Zone, and all or South.
2.03	1. The University of Melbourne. Köppen-Geiger Climate Map of the Wolrd. http://people.eng.unimelb.edu.au/mpeel/koppen.html (Accessed: 21 July 2015) 2. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?26955 (Accessed: 21 July 2015) 3. Global Biodiversity Information Facility. http://www.gbif.org/species/2874176 (Accessed: 21 July 2015)	1. Native or Naturalized within Köppen-Geiger zones Af, Am, Aw, Bsh, Csb, Cwa, Cwb, Cfa, Cfb, Dfa, Dfb 2. Native to: French Guiana, Guyana, Suriname, Venezuela, and Brazil. 3. See map. Peru, Haiti (introduced), Dominican Republic (introduced), Guyana, Surinam, French Guiana, Bolivia, Venezuela (Amazonas, Bolivar, Delta Amacuro), Colombia, N-Brazil (Roraima, Amapa, Para, Amazonas, Acre, Rondonia), NE-Brazil (Piaui, Bahia), WC-Brazil (Mato Grosso), USA (introduced) (Florida (introduced)); Additional Location Displayed on Map: Australia, China, New Caledonia, United States (Missouri, Connecticut), Honduras, Costa Rica, Ghana
2.04	1. Climate Charts. World Climate Maps. http://www.climate-charts.com/World-Climate-Maps.html#rain (Accessed: 21 July 2015) 2. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?26955 (Accessed: 21 July 2015) 3. Global Biodiversity Information Facility. http://www.gbif.org/species/2874176 (Accessed: 21 July 2015)	1. Native to areas with rainfall in this range 2. Native to: French Guiana, Guyana, Suriname, Venezuela, and Brazil. 3. See map. Peru, Haiti (introduced), Dominican Republic (introduced), Guyana, Surinam, French Guiana, Bolivia, Venezuela (Amazonas, Bolivar, Delta Amacuro), Colombia, N-Brazil (Roraima, Amapa, Para, Amazonas, Acre, Rondonia), NE-Brazil (Piaui, Bahia), WC-Brazil (Mato Grosso), USA (introduced) (Florida (introduced)); Additional Location Displayed on Map: Australia, China, New Caledonia, United States (Missouri, Connecticut), Honduras, Costa Rica, Ghana
2.05	1. Pacific Island Ecosystems at Risk. http://www.hear.org/pier/species/passiflora_coccinea.htm (Accessed: 23 July 2015) 2. Encyclopedia of Life. http://eol.org/pages/584514/data (Accessed: 23 July 2015) 3. Dave's Garden. http://davesgarden.com/guides/pf/go/1558/#b (Accessed: 23 July 2015)	1. Nauru Island- Introduced, Australia- Introduced, Singapore- Introduced 2. "Introduced range includes- Lower 48 United States of America" 3. Said to grow in Alabama, California, Florida, Hawaii, Louisiana, South Carolina, and Texas
3.01	1. Wet Tropics Management Authority. http://www.wettropics.gov.au/site/user-assets/docs/Weeds%202.pdf (Accessed: 23 July 2015)	1. Listed under "Appendix 2- List of exotic plants that have naturalised within the Wet Tropics Bioregion"

3.02	1. A Geographical Atlas of World Weeds. Kreiger Publishing Company. (Holm, Pancho, Herberger, Plucknett, 1991) (Accessed: 23 July 2015) 2. Global Compendium of Weeds. http://www.hear.org/gcw/species/passiflora_coccinea/ (Accessed: 23 July 2015)	1. Present as a weed in Peru 2. Listed as "environmental weed, garden thug, naturalised, weed"
3.03		No evidence
3.04	1. Global Compendium of Weeds. http://www.hear.org/gcw/species/passiflora_coccinea/ (Accessed: 23 July 2015)	1. Listed as environmental weed --- however, when checking the source Environmental Weeds of the Wet Tropics Bioregion: Risk Assessment & Priority Ranking, no evidence is found
3.05	1. A Geographical Atlas of World Weeds. Kreiger Publishing Company. (Holm, Pancho, Herberger, Plucknett, 1991) (Accessed: 23 July 2015) 2. Global Compendium of Weeds. http://www.hear.org/gcw/scientificnames/scinamep.htm (Accessed: 23 July 2015)	1. <i>Passiflora alba</i> , <i>P. biflora</i> , <i>P. edulis</i> , <i>P. foetida</i> , <i>P. incarnata</i> , <i>P. pulchella</i> , <i>P. rubra</i> , <i>P. sexflora</i> , <i>P. suberosa</i> , <i>P. suberosa</i> , and <i>P. subpelata</i> are all listed as weeds 2. Many plants in the Passifloraceae family are listed as weeds
4.01	1. Missouri Botanical Garden. http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=284903&isprofile=1&basic=passiflora (Accessed: 23 July 2015) 2. Pacific Island Ecosystems at Risk. http://www.hear.org/pier/species/passiflora_coccinea.htm (Accessed: 23 July 2015)	1&2. These features are not in the description of the species.
4.02		No evidence of allelopathy outside of a laboratory setting
4.03		No evidence
4.04		No evidence
4.05	1. Dave's Garden. http://davesgarden.com/guides/pf/go/1558/#b (Accessed: 23 July 2015)	1. "Parts of plant are poisonous if ingested" --- insufficient evidence
4.06	1. International Journal of Molecular Sciences. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4159842/ (Accessed: 23 July 2015)	1. "wild passion fruit species have desirable characteristics for the yellow passion fruit, including resistance to pathogens and pests (<i>P. caerulea</i> , <i>P. cincinnata</i> , <i>P. coccinea</i> , <i>Passiflora gilberti</i> , <i>P. laurifolia</i> , <i>P. setacea</i> , and <i>P. suberosa</i>)" --- No evidence that the taxon is a significant primary or alternate host.
4.07		No evidence
4.08		No evidence
4.09	1. Rare Exotic Seeds. http://www.rareexoticseeds.com/en/passiflora-seeds/passiflora-coccinea-seeds-passiflora-seeds.html (Accessed: 23 July 2015) 2. Learn2grow. http://www.learn2grow.com/plants/passiflora-coccinea/ (Accessed: 23 July 2015)	1. "place in full sun, can tolerate partial shade" 2. "It prefers to grow in full sun but will tolerate light shade for a short portion of the day"
4.10	1. Learn2grow. http://www.learn2grow.com/plants/passiflora-coccinea/ (Accessed: 23 July 2015) 2. University of Florida IFAS. http://hort.ifas.ufl.edu/database/documents/pdf/shrub_fact_sheets/pascoca.pdf (Accessed: 23 July 2015)	1. "Well-drained soil is required" 2. "Soil tolerances: occasionally wet; acidic; slightly alkaline; sand; loam; clay" --- insufficient evidence
4.11	1. University of Florida IFAS. http://hort.ifas.ufl.edu/database/documents/pdf/shrub_fact_sheets/pascoca.pdf (Accessed: 23 July 2015)	1. "Red Passion Flower is an evergreen, flowering vine from South America that climbs by tendrils"
4.12		No evidence
5.01	1. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?26955 (Accessed: 23 July 2015)	1. "Family: Passifloraceae"

5.02	1. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?26955 (Accessed: 23 July 2015)	1. "Family: Passifloraceae"
5.03	1. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?26955 (Accessed: 23 July 2015)	1. "Family: Passifloraceae"
5.04	1. Missouri Botanical Garden. http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=284903&isprofile=1&basic=passiflora (Accessed: 23 July 2015) 2. Pacific Island Ecosystems at Risk. http://www.hear.org/pier/species/passiflora_coccinea.htm (Accessed: 23 July 2015)	No evidence of specialized organs
6.01		No evidence
6.02	1. University of Florida IFAS. http://hort.ifas.ufl.edu/database/documents/pdf/shrub_fact_sheets/pascoca.pdf (Accessed: 23 July 2015) 2. Pacific Island Ecosystems at Risk. http://www.hear.org/pier/species/passiflora_coccinea.htm (Accessed: 23 July 2015)	1. "The Red Passion Flower is propagated by seeds or cuttings" 2. "Propagation: Seed"
6.03	1. International Journal of Molecular Sciences. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4159842/ (Accessed: 23 July 2015)	No evidence, except in a laboratory setting(1)
6.04	1. Learn2grow. http://www.learn2grow.com/plants/passiflora-coccinea/ (Accessed: 23 July 2015) 2. Grow Fruit. growfruit.tripod.com/passion.htm (Accessed: 23 July 2015)	Conflictng informaiton. 1. "Self-Sowing- Yes" 2. "Passiflora coccinea and Passiflora vitifolia, amongst the most handsome of ornamentals, are also self sterile but will fruit if hand-pollinated."
6.05	1. PubMed. http://www.ncbi.nlm.nih.gov/pubmed/16906307 (Accessed: 23 July 2015) 2. University of Florida IFAS. http://hort.ifas.ufl.edu/database/documents/pdf/shrub_fact_sheets/pascoca.pdf (Accessed: 23 July 2015)	1. Pollinated by hummingbirds. 2. Attracts butterflies and hummingbirds
6.06	1. Dave's Garden. http://davesgarden.com/guides/pf/go/1558/#b (Accessed: 23 July 2015)	Likely, but there is insufficient evidence 1. "Propagation Methods: By dividing rhizomes, tubers, corms or bulbs (including offsets), From herbaceous stem cuttings, From woody stem cuttings, From softwood cuttings, From semi-hardwood cuttings, From hardwood cuttings, From hardwood heel cuttings, and By air layering"
6.07		No evidence
7.01		No evidence
7.02	1. Seed Man. http://www.seedman.com/passiflora.htm (Accessed: 23 July 2015)	1. Available for purchase online
7.03		No evidence
7.04	1. Gardenweb. http://forums.gardenweb.com/discussions/2077273/have-passiflora-coccinea-seeds-red-granadilla (Accessed: 23 July 2015)	1. See photos. Seed does not have traits indicating wind dispersal.
7.05		No evidence
7.06		No evidence

7.07	1. Gardenweb. http://forums.gardenweb.com/discussions/2077273/have-passiflora-coccinea-seeds-red-granadilla (Accessed: 23 July 2015)	1. See photos. No mechanism of attachment is present.
7.08		No evidence
8.01		No evidence
8.02		No evidence
8.03		No evidence
8.04		No evidence
8.05	1. South Florida Water Management District. http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/ww6_waterwise_vines.pdf (Accessed: 23 July 2015) 2. University of Florida IFAS. http://hort.ifas.ufl.edu/database/documents/pdf/shrub_fact_sheets/pascoca.pdf (Accessed: 23 July 2015)	1. "Heavily damaged by nematodes." 1. "Pest resistance: long-term health usually not affected by pests" --- insufficient evidence