

Assessment date 13 July 2015

<i>Jasminum sambac</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	y	2
3.03	Weed of agriculture	n	0
3.04	Environmental weed	y	4
3.05	Congeneric weed	y	
4.01	Produces spines, thorns or burrs	n	0
4.02	Allelopathic	?	
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals	n	-1
4.05	Toxic to animals	n	0
4.06	Host for recognised pests and pathogens	unk	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	unk	-1

6.03	Hybridizes naturally	unk	-1
6.04	Self-compatible or apomictic	unk	-1
6.05	Requires specialist pollinators	unk	0
6.06	Reproduction by vegetative propagation	?	
6.07	Minimum generative time (years)		
7.01	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)		
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		
7.05	Propagules water dispersed		
7.06	Propagules bird dispersed		
7.07	Propagules dispersed by other animals (externally)	n	-1
7.08	Propagules dispersed by other animals (internally)		
8.01	Prolific seed production	n	-1
8.02	Evidence that a persistent propagule bank is formed (>1 yr)	n	-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>4</b>	
<b>Implemented Pacific Second Screening</b>		<b>Yes</b>	
<b>Risk Assessment Results</b>		<b>Eval</b>	

section	# questions answered	satisfy minimum?
A		10 yes
B		7 yes
C		10 yes
total		27 yes

Assessment date 13 July 2015

<i>Jasminum sambac</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	y	2
3.03	Weed of agriculture	n	0
3.04	Environmental weed	y	4
3.05	Congeneric weed	y	
4.01	Produces spines, thorns or burrs	n	0
4.02	Allelopathic	?	
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals	n	-1
4.05	Toxic to animals	n	0
4.06	Host for recognised pests and pathogens	unk	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	unk	-1

6.03	Hybridizes naturally	unk	-1
6.04	Self-compatible or apomictic	unk	-1
6.05	Requires specialist pollinators	unk	0
6.06	Reproduction by vegetative propagation	?	
6.07	Minimum generative time (years)		
7.01	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)		
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		
7.05	Propagules water dispersed		
7.06	Propagules bird dispersed		
7.07	Propagules dispersed by other animals (externally)	n	-1
7.08	Propagules dispersed by other animals (internally)		
8.01	Prolific seed production	n	-1
8.02	Evidence that a persistent propagule bank is formed (>1 yr)	n	-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>4</b>	
<b>Implemented Pacific Second Screening</b>		<b>Yes</b>	
<b>Risk Assessment Results</b>		<b>Eval</b>	

section	# questions answered	satisfy minimum?
A		10 yes
B		7 yes
C		10 yes
total		27 yes

	Reference	Source data
1.01		Cultivated but 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: 25 June 2015) 2. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/55251/#b">http://davesgarden.com/guides/pf/go/55251/#b</a> (Accessed: 25 June 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?20676">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20676</a> (Accessed: 25 June 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. Present in the following global plant hardiness zones: 9, 10, 11. 3. Native to India and Cultivated in China and India.
2.02		No computer analysis was preformed. Native range is well known. Hardiness zone 8 only accounts for part of the North Zone. Refer to 2.01 source data.
2.03	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?20676">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20676</a> (Accessed: 25 June 2015) 2. The University of Melbourne. Köppen-Geiger Climate Map of the Wolrd. <a href="http://people.eng.unimelb.edu.au/mpeel/koppen.html">http://people.eng.unimelb.edu.au/mpeel/koppen.html</a> (Accessed: 25 June 2015)	1. Native to India and Cultivated in China and India. 2. Occurs naturally in the following Köppen-Geiger Climate zones: Am, Aw, BSh, Cwa, Cwb
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: 25 June 2015)	1. Native to areas with rainfall in this range
2.05	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?20676">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20676</a> (Accessed: 25 June 2015) 2. Atlas of Florida Vascular Plants. <a href="http://florida.plantatlas.usf.edu/Plant.aspx?id=1441">http://florida.plantatlas.usf.edu/Plant.aspx?id=1441</a> (Accessed: 25 June 2015) 3. Pacific Island Ecosystems at Risk. <a href="http://www.hear.org/pier/species/jasminum_sambac.htm">http://www.hear.org/pier/species/jasminum_sambac.htm</a> (Accessed: 25 June 2015) 4. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/55251/#b">http://davesgarden.com/guides/pf/go/55251/#b</a> (Accessed: 25 June 2015)	1. Cultivated, but not native, within China 2. Found in multiple counties within South Florida 3. Introduced and cultivated within the Pacific Islands 4. Plant has been said to grow in California, Florida, Georgia, Louisiana, Massachusetts, Mississippi, New Jersey, North Carolina, South Carolina, and Texas and is listed for sale in the US and Canada

3.01	<p>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?20676">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20676</a> (Accessed: 25 June 2015) 2. Atlas of Florida Vascular Plants. <a href="http://florida.plantatlas.usf.edu/Plant.aspx?id=1441">http://florida.plantatlas.usf.edu/Plant.aspx?id=1441</a> (Accessed: 25 June 2015) 3. Pacific Island Ecosystems at Risk. <a href="http://www.hear.org/pier/species/jasminum_sambac.htm">http://www.hear.org/pier/species/jasminum_sambac.htm</a> (Accessed: 25 June 2015) 4. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/55251/#b">http://davesgarden.com/guides/pf/go/55251/#b</a> (Accessed: 25 June 2015) 5. Global Compendium of Weeds, Hawaiian Ecosystem at Risk, Department of Agriculture and Food, Australia. <a href="http://www.hear.org/gcw/species/jasminum_sambac/">http://www.hear.org/gcw/species/jasminum_sambac/</a> (Accessed: 25 June 2015)</p>	<p>1. Cultivated, but not native, within China 2. Found in multiple counties within South Florida 3. Introduced and cultivated within the Pacific Islands 4. Plant has been said to grow in California, Florida, Georgia, Louisiana, Massachusetts, Mississippi, New Jersey, North Carolina, South Carolina, and Texas and is listed for sale in the US and Canada 5. Classified as cultivation escape and naturalised</p>
3.02	<p>1. Global Compendium of Weeds, Hawaiian Ecosystem at Risk, Department of Agriculture and Food, Australia. <a href="http://www.hear.org/gcw/species/jasminum_sambac/">http://www.hear.org/gcw/species/jasminum_sambac/</a> (Accessed: 25 June 2015)</p>	<p>1. Classified as a cultivation escape, environmental weed, and weed</p>
3.03		<p>No evidence of crop yield loss</p>
3.04	<p>1. Global Compendium of Weeds, Hawaiian Ecosystem at Risk, Department of Agriculture and Food, Australia. <a href="http://www.hear.org/gcw/species/jasminum_sambac/">http://www.hear.org/gcw/species/jasminum_sambac/</a> (Accessed: 25 June 2015) 2. Journal of Agricultural Technology. <a href="http://www.ijat-aatsea.com/pdf/July_v7_n4_11/19%20IJAT2-6-2010%20_%20Poonpaiboopipat.pdf">http://www.ijat-aatsea.com/pdf/July_v7_n4_11/19%20IJAT2-6-2010%20_%20Poonpaiboopipat.pdf</a> (Accessed: 15 June 2015) 3. Weed Biology and Management. <a href="http://onlinelibrary.wiley.com/doi/10.1046/j.1444-6162.2003.00111.x/full">http://onlinelibrary.wiley.com/doi/10.1046/j.1444-6162.2003.00111.x/full</a> (Accessed: 15 June 2015)</p>	<p>1. Classified as an environmental weed. 2&amp;3. Plant has allelopathic tendencies.</p>
3.05	<p>1. Global Compendium of Weeds, Hawaiian Ecosystem at Risk, Department of Agriculture and Food, Australia. <a href="http://www.hear.org/gcw/scientificnames/scinamej.htm">http://www.hear.org/gcw/scientificnames/scinamej.htm</a> (Accessed: 25 June 2015)</p>	<p>1. <i>Jasminum bifarium</i> listed as agricultural weed, <i>Jasminum dichotomum</i> listed as environmental weed and noxious weed, <i>Jasminum fluminense</i> listed as environmental weed and noxious weed, <i>Jasminum mesnyi</i> listed as environmental weed, <i>Jasminum multiflorum</i> listed as environmental weed, <i>Jasminum multipartitum</i> listed as agricultural weed</p>
4.01	<p>1. Pacific Island Ecosystem at Risk. <a href="http://www.hear.org/pier/species/jasminum_sambac.htm">http://www.hear.org/pier/species/jasminum_sambac.htm</a> (Accessed: 25 June 2015) 2. Missouri Botanical Gardens. <a href="http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=282952&amp;isprofile=1&amp;basic=jasminum%20sambac">http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=282952&amp;isprofile=1&amp;basic=jasminum%20sambac</a> (Accessed: 25 June 2015)</p>	<p>1 &amp; 2. These characteristics are not listed in the description of this species</p>
4.02	<p>1. Journal of Agricultural Technology. <a href="http://www.ijat-aatsea.com/pdf/July_v7_n4_11/19%20IJAT2-6-2010%20_%20Poonpaiboopipat.pdf">http://www.ijat-aatsea.com/pdf/July_v7_n4_11/19%20IJAT2-6-2010%20_%20Poonpaiboopipat.pdf</a> (Accessed: 15 June 2015) 2. Weed Biology and Management. <a href="http://onlinelibrary.wiley.com/doi/10.1046/j.1444-6162.2003.00111.x/full">http://onlinelibrary.wiley.com/doi/10.1046/j.1444-6162.2003.00111.x/full</a> (Accessed: 15 June 2015)</p>	<p>Allelopathic tendencies have been documented, but were analyzed using concentrated samples of <i>Jasminum sambac</i> that may not be representative of naturally occurring processes.</p>
4.03		<p>No evidence</p>
4.04	<p>1. MediRabbit. <a href="http://www.medirabbit.com/EN/GI_diseases/Food/feeding_en.pdf">http://www.medirabbit.com/EN/GI_diseases/Food/feeding_en.pdf</a> (Accessed: 26 June 2015)</p>	<p>1. Listed as food for rabbits kept as pets.</p>
4.05	<p>1. MediRabbit. <a href="http://www.medirabbit.com/EN/GI_diseases/Food/feeding_en.pdf">http://www.medirabbit.com/EN/GI_diseases/Food/feeding_en.pdf</a> (Accessed: 26 June 2015)</p>	<p>1. Listed as food for rabbits kept as pets.</p>

4.06	<p>1. Basics of Horticulture. <a href="https://books.google.com/books?id=NWMa741kG_gC&amp;pg=PA376&amp;lpg=PA376&amp;dq=jasminum+sambac+pest&amp;source=bl&amp;ots=k85m_zCRSd&amp;sig=EfwS-woAtc7XNd9A4jyoeF3wITA&amp;hl=en&amp;sa=X&amp;ei=gRePVa3MMoO5-AGs1YCIDg&amp;ved=0CFEQ6AEwCDgU#v=onepage&amp;q=jasminum%20sambac%20pest&amp;f=false">https://books.google.com/books?id=NWMa741kG_gC&amp;pg=PA376&amp;lpg=PA376&amp;dq=jasminum+sambac+pest&amp;source=bl&amp;ots=k85m_zCRSd&amp;sig=EfwS-woAtc7XNd9A4jyoeF3wITA&amp;hl=en&amp;sa=X&amp;ei=gRePVa3MMoO5-AGs1YCIDg&amp;ved=0CFEQ6AEwCDgU#v=onepage&amp;q=jasminum%20sambac%20pest&amp;f=false</a> (Accessed: 27 June 2015) 2. LepIntercept. <a href="http://idtools.org/id/leps/lepintercept/duplifascialis.html">http://idtools.org/id/leps/lepintercept/duplifascialis.html</a> (Accessed: 27 June 2015) 3. Cooperative Extension Service, University of Hawaii. <a href="http://www.ctahr.hawaii.edu/oc/freepubs/pdf/IP-11.pdf">http://www.ctahr.hawaii.edu/oc/freepubs/pdf/IP-11.pdf</a> (Accessed: 27 June 2015)</p>	<p>1. The bud-worm and blossom midge are listed as pests on Jasminum sambac. 2. Bud-worm is not found in the United States. 3. Blossom midge has been reported to feed on orchids in Florida. No evidence that the plant is a significant primary or alternate host.</p>
4.07	<p>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?20676">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20676</a> (Accessed: 25 June 2015)</p>	<p>1. Widely used as an essential oil in fragrances, a flavoring, especially for tea, and as a herbal medicine in many cultures</p>
4.08		<p>No information found on flammability</p>
4.09	<p>1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/55251/">http://davesgarden.com/guides/pf/go/55251/</a> (Accessed: 26 June 2015)</p>	<p>1. Sun exposure: Full sun to partial shade</p>
4.10	<p>1. Flower Crops: Cultivation and Management. <a href="https://books.google.com.ph/books?id=Bfb1T6QbfaAC&amp;lpg=PA193&amp;dq=Jasminum+genus&amp;pg=PA193&amp;hl=en#v=onepage&amp;q&amp;f=false">https://books.google.com.ph/books?id=Bfb1T6QbfaAC&amp;lpg=PA193&amp;dq=Jasminum+genus&amp;pg=PA193&amp;hl=en#v=onepage&amp;q&amp;f=false</a> (Accessed: 6 July 2015)</p>	<p>1. "Jasmine can be produced on almost any soil type, with ample water supply. Jasmine gives good results in well-drained rich loam soil. In clay soil, vegetative growth is vigorous but flower production declines. While in gravel soil, plants become stunted. Water logging conditions damages plants of jasmine. Soil pH vary from 5-8. Loamy soil is best suited for cultivation of all species and varieties of jasmine. With application of adequate amount of manure and assured water supply jasmine can also be grown in sandy soil. Clay soil can be improved by addition of lime and application of organic manure for successful cultivation." --- Not enough information. Broadly, jasmine plants can grow in poor soil but still require a large amount of water. However, they do benefit from substantial amounts of organic content in the soil.</p>
4.11	<p>1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/55251/">http://davesgarden.com/guides/pf/go/55251/</a> (Accessed: 26 June 2015) 2. Peck's Green Thumb. <a href="http://plants.pecksgreenthumb.com/12100002/Plant/Print/18126">http://plants.pecksgreenthumb.com/12100002/Plant/Print/18126</a> (Accessed: 6 July 2015)</p>	<p>1. Categorized within Vines and Climbers 2. "Climbing habit perfect for walls" Criteria states to assume a vine or vining shrub has the potential to smother unless negative evidence from the naturalized range is present. No negative evidence was found.</p>
4.12		
5.01	<p>1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/55251/">http://davesgarden.com/guides/pf/go/55251/</a> (Accessed: 26 June 2015)</p>	<p>1. Family- Olaceae; no evidence to support aquatic status</p>
5.02	<p>1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/55251/">http://davesgarden.com/guides/pf/go/55251/</a> (Accessed: 26 June 2015)</p>	<p>1. Family- Olaceae</p>
5.03	<p>1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/55251/">http://davesgarden.com/guides/pf/go/55251/</a> (Accessed: 26 June 2015)</p>	<p>1. Family- Olaceae</p>
5.04		<p>No evidence of specialized organs</p>
6.01		<p>No evidence found of substantial reproductive failure</p>

6.02	<p>1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/55251/">http://davesgarden.com/guides/pf/go/55251/</a> (Accessed: 26 June 2015) 2. Plants of Abdulla Mohammad Saleh Garden: A Garden in the Arabian Deserts of Dubai. <a href="https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5JFf0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false">https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5JFf0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false</a> (Accessed: 16 June 2015)</p>	<p>1. "Seed Collecting: N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed" 2. "Only a few varieties reproduce by seed in the wild. Cultivated Jasminum sambac generally do not bear seeds and the plant is reproduced solely by cuttings, layering, marcotting, and other methods of asexual propagation."</p>
6.03	<p>1. Plants of Abdulla Mohammad Saleh Garden: A Garden in the Arabian Deserts of Dubai. <a href="https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5JFf0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false">https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5JFf0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false</a> (Accessed: 16 June 2015)</p>	<p>1. "The species is highly variable, possibly a result of spontaneous mutilation, natural hybridization, and autopolyploidy." This information is speculative and further research is needed.</p>
6.04	<p>1. Learn2grow. <a href="http://www.learn2grow.com/plants/jasminum-sambac/">http://www.learn2grow.com/plants/jasminum-sambac/</a> (Accessed: 6 July 2015) 2. Learn2grow. <a href="http://www.learn2grow.com/plants/jasminum-sambac-grand-duke-of-tuscany/">http://www.learn2grow.com/plants/jasminum-sambac-grand-duke-of-tuscany/</a> (Accessed: 6 July 2015) 3. Peck's Green Thumb. <a href="http://plants.pecksgreenthumb.com/12100002/Plant/Print/18126">http://plants.pecksgreenthumb.com/12100002/Plant/Print/18126</a> (Accessed: 6 July 2015)</p>	<p>1. "Self-Sowing- Yes" 2. "Because of its ability to self-seed, cultivars of Arabian jasmine are sometimes considered invasive in subtropical and tropical regions" 3. "Gardeners should be aware of the following characteristic(s) that may warrant special consideration; -Self Seeding"</p>
6.05	<p>1. Molecules. <a href="http://www.mdpi.com/2F1420-3049/2F20%2F6%2F10734%2Fpdf&amp;ei=AYiaVYjJ8OZNTyNgdGC&amp;usg=AFQjCNE12eWewxZdE2gfnbkDWILMExAt8g&amp;sig2=DmE28x-w3Lp1r5BD1ZeYhg&amp;bvm=bv.96952980,d.eXY">source=web&amp;cd=5&amp;ved=0CDoQFjAE&amp;url=http%3A%2F%2Fwww.mdpi.com%2F1420-3049%2F20%2F6%2F10734%2Fpdf&amp;ei=AYiaVYjJ8OZNTyNgdGC&amp;usg=AFQjCNE12eWewxZdE2gfnbkDWILMExAt8g&amp;sig2=DmE28x-w3Lp1r5BD1ZeYhg&amp;bvm=bv.96952980,d.eXY</a> (Accessed: 6 July 2015) 2. Plant Species Biology. <a href="http://onlinelibrary.wiley.com/store/10.1046/j.1442-1984.1999.00014.x/asset/j.1442-1984.1999.00014.x.pdf?v=1&amp;t=ibrz97q7&amp;s=f335c7fc914fc4fe31e8c901fcdc74496d008fec">http://onlinelibrary.wiley.com/store/10.1046/j.1442-1984.1999.00014.x/asset/j.1442-1984.1999.00014.x.pdf?v=1&amp;t=ibrz97q7&amp;s=f335c7fc914fc4fe31e8c901fcdc74496d008fec</a> (Accessed: 6 July 2015)</p>	<p>1. "To date (2015), no pollination studies have been reported on J. sambac. This species has a few morphological and biological characteristics adapted to cross-pollination; these characteristics include large and white petals and strong and sweet fragrances."</p>
6.06	<p>1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/55251/">http://davesgarden.com/guides/pf/go/55251/</a> (Accessed: 27 June 2015)</p>	<p>1. Propagation from simple layering and serpentine is possible, but there is no documented evidence of this process (or any other process of the plant increasing its numbers by vegetative means) occurring naturally 2. Listed as being pollinated at night by moths? Moths are common pollinators of other plants in the Oleaceae family like Jasminum polyanthum and Jasminum grandiflora, but the authors are unsure if it is also the main pollinator of Jasminum sambac.</p>
6.07	<p>1. J. ISSAAS. <a href="http://www.issaas.org/journal/v16/02/journal-issaasv16n2-13-sanchez.pdf">http://www.issaas.org/journal/v16/02/journal-issaasv16n2-13-sanchez.pdf</a> (Accessed: 6 June 2015)</p>	<p>1. "there is a need to determine the optimum maturity index and to improve harvesting practices for the fresh market"</p>
7.01	<p>1. Plants of Abdulla Mohammad Saleh Garden: A Garden in the Arabian Deserts of Dubai. <a href="https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5JFf0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false">https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5JFf0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false</a> (Accessed: 16 June 2015)</p>	<p>Insufficient evidence, but unlikely. 1. "Only a few varieties reproduce by seed in the wild. Cultivated Jasminum sambac generally do not bear seeds and the plant is reproduced solely by cuttings, layering, marcotting, and other methods of asexual propagation."</p>



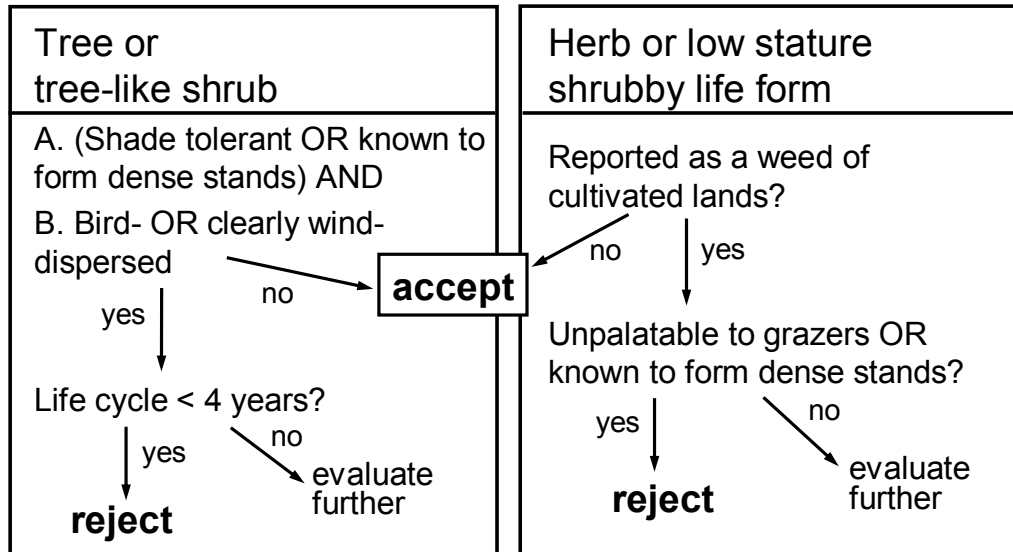
7.02	1. Logee's Plants for Home and Garden. <a href="http://www.logees.com/jasmine-maid-of-orleans-jasminum-sambac-2inch.html">http://www.logees.com/jasmine-maid-of-orleans-jasminum-sambac-2inch.html</a> (Accessed: 27 June 2015) 2. Lowe's. <a href="http://www.lowes.com/pd_374060-1513-NURSERY_0__?productId=3956207">http://www.lowes.com/pd_374060-1513-NURSERY_0__?productId=3956207</a> (Accessed: 27 June 2015)	1. Plant available for purchase online. Advertised as having many desirable qualities: "This everblooming Jasmine has a bushy growth habit and does particularly well on windowsills. The fragrance of the white flowers clears the air and adds a touch of peaceful tranquility. Place 'Maid of Orleans' on the sill, sit in a nearby chair and breathe in its delightful scent." 2. Available for purchase in Lowe's stores.
7.03		Lack of positive evidence
7.04	1. Plants of Abdulla Mohammad Saleh Garden: A Garden in the Arabian Deserts of Dubai. <a href="https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5Jff0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false">https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5Jff0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false</a> (Accessed: 16 June 2015)	Insufficient evidence, but unlikely. 1. "Only a few varieties reproduce by seed in the wild. Cultivated Jasminum sambac generally do not bear seeds and the plant is reproduced solely by cuttings, layering, marcotting, and other methods of asexual propagation."
7.05	1. Plants of Abdulla Mohammad Saleh Garden: A Garden in the Arabian Deserts of Dubai. <a href="https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5Jff0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false">https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5Jff0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false</a> (Accessed: 16 June 2015)	Insufficient evidence, but unlikely. 1. "Only a few varieties reproduce by seed in the wild. Cultivated Jasminum sambac generally do not bear seeds and the plant is reproduced solely by cuttings, layering, marcotting, and other methods of asexual propagation."
7.06	1. Plants of Abdulla Mohammad Saleh Garden: A Garden in the Arabian Deserts of Dubai. <a href="https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5Jff0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false">https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5Jff0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false</a> (Accessed: 16 June 2015)	Insufficient evidence, but unlikely. 1. "Only a few varieties reproduce by seed in the wild. Cultivated Jasminum sambac generally do not bear seeds and the plant is reproduced solely by cuttings, layering, marcotting, and other methods of asexual propagation."
7.07		No evidence, but no clear mechanism of attachment is present
7.08	1. Plants of Abdulla Mohammad Saleh Garden: A Garden in the Arabian Deserts of Dubai. <a href="https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5Jff0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false">https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5Jff0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false</a> (Accessed: 16 June 2015)	Insufficient evidence, but unlikely. 1. "Only a few varieties reproduce by seed in the wild. Cultivated Jasminum sambac generally do not bear seeds and the plant is reproduced solely by cuttings, layering, marcotting, and other methods of asexual propagation."
8.01	1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/55251/">http://davesgarden.com/guides/pf/go/55251/</a> (Accessed: 26 June 2015) 2. Plants of Abdulla Mohammad Saleh Garden: A Garden in the Arabian Deserts of Dubai. <a href="https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5Jff0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false">https://books.google.com/books?id=i_tpBAAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5Jff0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false</a> (Accessed: 16 June 2015)	1. "Seed Collecting: N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed" 2. "Only a few varieties reproduce by seed in the wild. Cultivated Jasminum sambac generally do not bear seeds and the plant is reproduced solely by cuttings, layering, marcotting, and other methods of asexual propagation."

8.02	<p>1. Dave's Garden. <a href="http://davesgarden.com/guides/pf/go/55251/">http://davesgarden.com/guides/pf/go/55251/</a> (Accessed: 26 June 2015) 2. Plants of Abdulla Mohammad Saleh Garden: A Garden in the Arabian Deserts of Dubai. <a href="https://books.google.com/books?id=i_tpBAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5JFf0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false">https://books.google.com/books?id=i_tpBAAQBAJ&amp;pg=PT396&amp;lpg=PT396&amp;dq=jasminum+sambac+hybridization&amp;source=bl&amp;ots=WfpC3gHyP3&amp;sig=XFAB6ODNOWoG6wBn_WqdmA5JFf0&amp;hl=en&amp;sa=X&amp;ei=vKaNVfyqDsT7-AGO4IKABw&amp;ved=0CFsQ6AEwDg#v=onepage&amp;q=jasminum%20sambac%20hybridization&amp;f=false</a> (Accessed: 16 June 2015) 3. Flower Crops: Cultivation and Management. <a href="https://books.google.com.ph/books?id=Bfb1T6QbfaAC&amp;lpg=PA193&amp;dq=Jasminum+genus&amp;pg=PA193&amp;hl=en#v=onepage&amp;q&amp;f=false">https://books.google.com.ph/books?id=Bfb1T6QbfaAC&amp;lpg=PA193&amp;dq=Jasminum+genus&amp;pg=PA193&amp;hl=en#v=onepage&amp;q&amp;f=false</a> (Accessed: 6 July 2015)</p>	<p>1. "Seed Collecting: N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed" 2. "Only a few varieties reproduce by seed in the wild. Cultivated Jasminum sambac generally do not bear seeds and the plant is reproduced solely by cuttings, layering, marcotting, and other methods of asexual propagation." 3. "Few varieties of J. sambac have been reported to set seeds... Viability of seeds is up to 10 months."</p>
8.03	<p>1. Flower Crops: Cultivation and Management. <a href="https://books.google.com.ph/books?id=Bfb1T6QbfaAC&amp;lpg=PA193&amp;dq=Jasminum+genus&amp;pg=PA193&amp;hl=en#v=onepage&amp;q&amp;f=false">https://books.google.com.ph/books?id=Bfb1T6QbfaAC&amp;lpg=PA193&amp;dq=Jasminum+genus&amp;pg=PA193&amp;hl=en#v=onepage&amp;q&amp;f=false</a> (Accessed: 6 July 2015)</p>	<p>1. "Application of SAFH inhibited shoot growth in Jasminum sambac... In Jasminum sambac, GA3 and etherel delayed the onset of flowering and reduced essential oil content." There is no evidence suggesting the use of chemicals is successful for complete control of the plant, only the documented inhibited shoot growth and delayed flowering. This plant is desirable for cultivation and for its scent. Most chemical manipulation that has been researched was intended to enhance the growth, not to hinder it.</p>
8.04		No evidence
8.05	<p>1. Basics of Horticulture. <a href="https://books.google.com/books?id=NWMa741kG_gC&amp;pg=PA376&amp;lpg=PA376&amp;dq=jasminum+sambac+pest&amp;source=bl&amp;ots=k85m_zCRsd&amp;sig=EfwS-woAtc7XNd9A4jyoeF3wITA&amp;hl=en&amp;sa=X&amp;ei=gRePVa3MMoO5-AGs1YCIDg&amp;ved=0CFEQ6AEwCDgU#v=onepage&amp;q=jasminum%20sambac%20pest&amp;f=false">https://books.google.com/books?id=NWMa741kG_gC&amp;pg=PA376&amp;lpg=PA376&amp;dq=jasminum+sambac+pest&amp;source=bl&amp;ots=k85m_zCRsd&amp;sig=EfwS-woAtc7XNd9A4jyoeF3wITA&amp;hl=en&amp;sa=X&amp;ei=gRePVa3MMoO5-AGs1YCIDg&amp;ved=0CFEQ6AEwCDgU#v=onepage&amp;q=jasminum%20sambac%20pest&amp;f=false</a> (Accessed: 27 June 2015) 2. LepIntercept. <a href="http://idtools.org/id/leps/lepintercept/duplifascialis.html">http://idtools.org/id/leps/lepintercept/duplifascialis.html</a> (Accessed: 27 June 2015) 3. Cooperative Extension Service, University of Hawaii. <a href="http://www.ctahr.hawaii.edu/oc/freepubs/pdf/IP-11.pdf">http://www.ctahr.hawaii.edu/oc/freepubs/pdf/IP-11.pdf</a> (Accessed: 27 June 2015)</p>	<p>1. The bud-worm and blossom midge are listed as pests on Jasminum sambac. 2. Bud-worm is not found in the United States. 3. Blossom midge has been reported to feed on orchids in Florida. No evidence of substantially reduced growth and reproduction.</p>

# *Jasminum sambac*

## Pacific second screening: decision rules for species with WRA scores between 1 and 6

(from Daehler *et al.* 2004)



Vines must pass both tests

This species passes the herb side of the SS. It is unknown if this and there is no information regarding bird or wind dispersal. Therefore the results of the SS is 'Evaluate'