

<b><i>Eucalyptus robusta</i> (Swamp Messmate, Swamp Stringybark, Swamp-Mahogany) -- FLORIDA</b>		<b>Answer</b>	<b>Score</b>
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 FL climates (USDA hardiness zones; 0-low, 1-intermediate, 2-high)	2	
2.02	Quality of climate match data (0-low; 1-intermediate; 2-high)	2	
2.03	Broad climate suitability (environmental versatility)	n	0
2.04	Native or naturalized in regions with an average of 11-60 inches of annual precipitation	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	?	
3.03	Weed of agriculture	Y	4
3.04	Environmental weed	n	0
3.05	Congeneric weed	y	2
4.01	Produces spines, thorns or burrs	n	0
4.02	Allelopathic	?	
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals	?	
4.05	Toxic to animals	?	
4.06	Host for recognised pests and pathogens		
4.07	Causes allergies or is otherwise toxic to humans		
4.08	Creates a fire hazard in natural ecosystems	?	
4.09	Is a shade tolerant plant at some stage of its life cycle	?	
4.10	Grows on infertile soils (oligotrophic, limerock, or excessively draining soils). North & Central Zones: infertile soils; South Zone: shallow limerock or Histisols.	y	1
4.11	Climbing or smothering growth habit	n	0
4.12	Forms dense thickets	n	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		
6.02	Produces viable seed	y	1
6.03	Hybridizes naturally	y	1
6.04	Self-compatible or apomictic	y	1
6.05	Requires specialist pollinators	n	0
6.06	Reproduction by vegetative propagation	n	-1
6.07	Minimum generative time (years)	4	-1

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		
7.04	Propagules adapted to wind dispersal	?	
7.05	Propagules water dispersed	y	1
7.06	Propagules bird dispersed	n	-1
7.07	Propagules dispersed by other animals (externally)	n	-1
7.08	Propagules dispersed by other animals (internally)	n	-1
8.01	Prolific seed production	y	1
8.02	Evidence that a persistent propagule bank is formed (>1 yr)	n	-1
8.03	Well controlled by herbicides	?	
8.04	Tolerates, or benefits from, mutilation or cultivation	y	1
8.05	Effective natural enemies present in U.S.		
	<b>Total Score</b>		<b>11</b>
	<b>Implemented Pacific Second Screening</b>		<b>No</b>
	<b>Risk Assessment Results</b>		<b>Reject</b>

	Reference	Source data
1.01		Cultivated but no evidence of selection for reduced weediness.
1.02		Skip to 2.01
1.03		Skip to 2.01
2.01	1. PERAL NAPPFast Global Plant Hardiness ( <a href="http://www.nappfast.org/Plant_hardiness/NAPPFast%20Global%20zones/10-year%20climate/PLANT_HARDINESS_10YR%20lgnd.tif">http://www.nappfast.org/Plant_hardiness/NAPPFast%20Global%20zones/10-year%20climate/PLANT_HARDINESS_10YR%20lgnd.tif</a> ) & USDA Plant Hardiness Zone Map, 2012. Agricultural Research Service, U.S. Department of Agriculture. Accessed from <a href="http://planthardiness.ars.usda.gov">http://planthardiness.ars.usda.gov</a> . 2. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland ( <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948</a> [Accessed: 19 March 2012]). 3. "Eucalyptus robusta ." horticultura.com. Horticultura, 2011. Web. 29 May 2012. 4. Boland, D.J. et al. <i>Forest Trees of Australia</i> . 5th ed. Collingswood, Victoria, Australia: CSIRO, 2006. Print.	<b>No computer analysis was performed.</b> 1. Global plant hardiness zones (8?-)9-10; equivalent to USDA Hardiness zones 8a-10a (north, central, south zones of Florida). 2. Native distribution: east New South Wales and southeast Queensland, Australia. 3. Hardy range 8b-11. 4. Occurs in a very narrow coastal belt from north of Rockhampton in Queensland to Jervis Bay in New South Wales.
2.02		<b>No computer analysis was performed.</b> 1. Native range is well known; refer to 2.01 source data.
2.03	1. Köppen-Geiger climate map ( <a href="http://www.hydrol-earth-syst-sci.net/11/1633/2007/hess-11-1633-2007.pdf">http://www.hydrol-earth-syst-sci.net/11/1633/2007/hess-11-1633-2007.pdf</a> ). 2. Boland, D.J. et al. <i>Forest Trees of Australia</i> . 5th ed. Collingswood, Victoria, Australia: CSIRO, 2006. Print.	1. Native distribution appears to be in two climatic groups (Cfa, Cfb). 2. Altitudinal range near sea level to 90 m (295.3').
2.04	1. Australia's Virtual Herbarium. 2009. <a href="http://chah.gov.au/avh/index.jsp">http://chah.gov.au/avh/index.jsp</a> . Accessed: 9 May 2012. 2. Boland, D.J. et al. <i>Forest Trees of Australia</i> . 5th ed. Collingswood, Victoria, Australia: CSIRO, 2006. Print. 3. "Eucalyptus robusta ." horticultura.com. Horticultura, 2011. Web. 29 May 2012.	1. 800 mm-3200 mm (31.5"- 126.0"). 2. 1000 mm-1700 mm (39.4"-66.9"). 3. Grows in non-native climates ranging from 40"-250" (1016 mm-6350 mm) annual rainfall.

2.05	<p>1. USDA, NRCS. 2012. The PLANTS Database (<a href="http://plants.usda.gov">http://plants.usda.gov</a>, 2 July 2012). National Plant Data Team, Greensboro, NC 27401-4901 USA. Accessed: 29 May 2012.</p> <p>2. Hawaiian Ecosystems at Risk project (HEAR), The Global Compendium of Weeds. <a href="http://www.hear.org/gcw/">http://www.hear.org/gcw/</a>. Accessed 29 May 2012.</p> <p>3. Little, Jr., E.L. <i>Common Fuelwood Crops</i>. Morgantown, WV: Communit-Tech Associates, 1983. Print.</p> <p>4. Duke, J.A. 1983. <i>Handbook of Energy Crops</i>. Unpublished. Web. <a href="http://www.hort.purdue.edu/newcrop/default.html">http://www.hort.purdue.edu/newcrop/default.html</a>. Accessed 13 February 2012.</p> <p>5. Little, Jr., E.L. <i>Common Fuelwood Crops, A Handbook for Their Identification</i>. Morgantown, WV: Communi-Tech Associates, 1983.</p>	<p>1. Present in Florida and Hawaii. 2. Caribbean territory, Ecuador, New Zealand, southeastern Australia (bushland), United States (Florida, Hawaii), Puerto Rico. 3. It has been introduced into Florida, California, and Hawaii; Brazil, South Africa, &amp; New Zealand. 4. Widely introduced in tropical and subtropical areas. Cultivated, for example, in Angola, Argentina, Arizona, Brazil, California, Cameroon, China, Congo, Costa Rica, Florida, Ghana, India, Indonesia, Israel, Ivory Coast, Malagasy, Malaysia, Mauritius, New Hebrides, Nigeria, Peru, Philippines, Puerto Rico, Sri Lanka, Tanzania, and Vietnam. 5. Grown in coastal California.</p>
3.01	<p>1. Howell, C. et al. 2006. <i>New Zealand Naturalised Vascular Plant Checklist</i>. New Zealand Plant Conservation Network.</p> <p>2. Kairo, M. et al. 2003. <i>Report to the Nature Conservancy: Invasive Species Threats in the Caribbean Region</i>. CAB International.</p> <p>3. Wagner, W.L. et al. <i>Manual of the Flowering Plants of Hawai'i</i>. Vol. 1. Honolulu, HI: Bishop Museum Press, 1990. Print.</p>	<p>1. <i>E. robusta</i> is fully naturalised in New Zealand. 2. <i>E. robusta</i> is exotic and naturalised in Puerto Rico. 3. "In Hawai'i planted, often as windbreaks, on Kaua'i, O'ahu, Moloka'i, Maui, and Hawai'i, and regenerating from seed in and near these areas."</p>
3.02	<p>1. Hawaiian Ecosystems at Risk project (HEAR), The Global Compendium of Weeds. <a href="http://www.hear.org/gcw/">http://www.hear.org/gcw/</a>. Accessed 29 May 2012.</p>	<p>1. Listed as a weed but unable to confirm claim.</p>
3.03	<p>1. Richardson, D.M. &amp; Rejmanek, M. 2011. Trees and shrubs as invasive alien species - a global review. <i>Diversity and Distributions</i>, 17: 788-809.</p>	<p>1. Introduced for forestry and listed on the database of invasive trees and shrubs in Africa (not southern).</p>
3.04		<p>No evidence.</p>
3.05	<p>1. Holm, L. et al. <i>A Geographical Atlas of World Weeds</i>. John Wiley and Sons, New York. 1979.</p>	<p>1. The following <i>eucalypts</i> are considered principal weeds in Australia (principal weed in this context is ranked according to the importance of the weed and is usually referring to about the five most troublesome species for the crop): <i>E. cambageana</i>, <i>E. ferruginea</i>, <i>E. gracilis</i>, <i>E. marginata</i>, <i>E. miniata</i>, <i>E. pilularis</i>, <i>E. populnea</i>, <i>E. tetradonta</i>.</p>
4.01		<p>No evidence.</p>

4.02	<p>1. Anonymous. 2009. "Focus on Eucalypts." SAPIA NEWS No. 12. ARC-Plant Protection Research Institute, South Africa. 2. Anonymous. October 2010. Scotland, Forestry Commission. Interim Guidance on the Grant Aiding and Planting of Eucalypts in Scotland. Accessed: 1 June 2012. 3. Rejmánek, M. &amp; D.M. Richardson. 2011. Eucalypts (203-209). In D. Simberloff &amp; M. Rejmánek, eds. <i>Encyclopedia of Biological Invasions</i>. Berkeley: University of California Press.</p>	<p>1. It is likely that most Eucalypts are allelopathic-having the potential to suppress understory plants through chemical inhibitors that leach into the soil. 2. There are many reports in global literature of toxic inhibition of germination and growth of other plant species (allelopathic effects), which inhibits the growth of an understory. 3. Concerns expressed about suppression of ground vegetation due to possible allelopathic effects. Allelopathic effects are widely reported and these reports are largely based on laboratory bioassays. If not chemical inhibition then at least accumulation of dead material of the floor of eucalypt plantations hinders regeneration of native species.</p>
4.03		No evidence.
4.04	<p>1. United States Department of Agriculture Permit applications 08-11-106rm and 08-014-101rm received from ArborGen LLC. Field testing of genetically engineered <i>E. grandis</i> X <i>E. urophylla</i> (<a href="http://www.aphis.usda.gov/brs/aphisdocs/08_014101rm_ea2.pdf">http://www.aphis.usda.gov/brs/aphisdocs/08_014101rm_ea2.pdf</a> [Accessed: 8/19/2010]).</p>	<p>1. Eucalyptus species are known to produce chemical compounds that are required by the plant for defense against herbivores and pathogens.</p>
4.05	<p>1. <i>Medicinal Plants for Livestock: Eucalyptus spp.</i> Cornell University, Department of Animal Science. <a href="http://www.ansci.cornell.edu/plants/medicinal/eucalyp.html">http://www.ansci.cornell.edu/plants/medicinal/eucalyp.html</a>. 1 June 2012.</p>	<p>1. "<i>Eucalyptus spp.</i> contain high levels of phenolics and terpenoids which can be toxic. Animals such as the koala which eat Eucalyptus have developed methods for detoxifying the compounds in the liver. In addition, they have bacteria that degrade tannin-protein complexes. Most animals do not have this ability."</p>
4.06		
4.07		
4.08	<p>1. Gill, A.M. "Eucalypts and fires: interdependent or independent?" In: <i>Eucalypt ecology: individuals to ecosystems</i>. Ed. J.E. Williams &amp; J. Woinarski. Cambridge, New York: Cambridge University Press, 1997. 2. Rejmánek, M. &amp; D.M. Richardson. 2011. Eucalypts (203-209). In D. Simberloff &amp; M. Rejmánek, eds. <i>Encyclopedia of Biological Invasions</i>. Berkeley: University of California Press.</p>	<p>1. Eucalypts often are the major source of fuel for fires, but not always. 2. Leaves of eucalypts are relatively slow to breakdown and have a high volatile oil content, which contributes to the severity of fire events in their native Australia.</p>
4.09	<p>1. Rejmánek, M. &amp; D.M. Richardson. 2011. Eucalypts (203-209). In D. Simberloff &amp; M. Rejmánek, eds. <i>Encyclopedia of Biological Invasions</i>. Berkeley: University of California Press. 2. "<i>Eucalyptus robusta</i>." <i>horticopia.com</i>. Horticopia, 2011. Web. 21 May 2012.</p>	<p>1. Shade-tolerant sub-canopy [<i>Eucalyptus</i>] species are not known. 2. "Partial shade or partial sun to full sun".</p>

4.10	1. " <i>Eucalyptus robusta</i> ." <i>horticopia.com</i> . Horticopia, 2011. Web. 21 May 2012. 2. Boland, D.J. et al. <i>Forest Trees of Australia</i> . 5th ed. Collingswood, Victoria, Australia: CSIRO, 2006. Print.	1. "Suitable soil is well-drained/loamy, sandy or clay. The pH preference is an acidic to alkaline (less than 6.8 to 7.7) soil." 2. Soils are typically heavy clays, but will grow well on light sandy clays.
4.11	1. Wagner, W.L. et al. <i>Manual of the Flowering Plants of Hawai'i</i> . Vol. 1. Honolulu, HI: Bishop Museum Press, 1990. Print.	1. "Trees 20-30 m tall".
4.12	1. Boland, D.J. et al. <i>Forest Trees of Australia</i> . 5th ed. Collingswood, Victoria, Australia: CSIRO, 2006. Print.	1. Usually attains heights of 20-30 m; trunk is typically straight.
5.01	1. Boland, D.J. et al. <i>Forest Trees of Australia</i> . 5th ed. Collingswood, Victoria, Australia: CSIRO, 2006. Print.	1. Occurring in swamps and on the edges of saltwater estuaries and lagoons; occurs in open forests.
5.02	1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland ( <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948</a> [Accessed: 8 May 2012]).	1. Family: <i>Myrtaceae</i> .
5.03	1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland ( <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948</a> [Accessed: 8 May 2012]).	1. Family: <i>Myrtaceae</i> .
5.04	1. Wagner, W.L. et al. <i>Manual of the Flowering Plants of Hawai'i</i> . Vol. 1. Honolulu, HI: Bishop Museum Press, 1990. Print.	1. "Trees 20-30 m tall".
6.01		
6.02	1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland ( <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948</a> [Accessed: 5 May 2012])	1. Propagated by seed.
6.03	1. Little, Jr., E.L. <i>Common Fuelwood Crops, A Handbook for Their Identification</i> . Morgantown, WV: Communi-Tech Associates, 1983. 2. The Royal Botanic Gardens and Domain Trust (30 January 2012). PlantNET - The Plant Information Network System of The Royal Botanic Gardens and Domain Trust, Sydney, Australia (version 2.0). <a href="http://plantnet.rbgsyd.nsw.gov.au">http://plantnet.rbgsyd.nsw.gov.au</a> . 3. Jiofack Tafokou, R.B., 2008. <i>Eucalyptus robusta</i> Sm. [Internet] Record from Protabase. Louppe, D., Oteng-Amoako, A.A. & Brink, M. (Editors). PROTA (Plant Resources of Tropical Africa/Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. <a href="http://database.prota.org/search.htm">http://database.prota.org/search.htm</a> . Accessed 5 May 2012.	1. A natural hybrid between <i>Eucalyptus grandis</i> and <i>Eucalyptus robusta</i> , known as <i>Eucalyptus grandis</i> var. <i>grandiflora</i> Maid. 2. Hybrids with <i>Eucalyptus tereticornis</i> , known as <i>Eucalyptus patentinervis</i> . 3. Several natural hybrids involving <i>Eucalyptus robusta</i> have been reported.

6.04	1. Jiofack Tafokou, R.B., 2008. <i>Eucalyptus robusta</i> Sm. [Internet] Record from Protabase. Louppe, D., Oteng-Amoako, A.A. & Brink, M. (Editors). PROTA (Plant Resources of Tropical Africa/Ressources végétales de l’Afrique tropicale), Wageningen, Netherlands. <a href="http://database.prota.org/search.htm">http://database.prota.org/search.htm</a> . Accessed 5 May 2012.	1. The genetic base of <i>Eucalyptus robusta</i> in Madagascar is rather narrow, resulting in inbreeding, low-quality seeds and poor performance.
6.05	1. Jiofack Tafokou, R.B., 2008. <i>Eucalyptus robusta</i> Sm. [Internet] Record from Protabase. Louppe, D., Oteng-Amoako, A.A. & Brink, M. (Editors). PROTA (Plant Resources of Tropical Africa/Ressources végétales de l’Afrique tropicale), Wageningen, Netherlands. <a href="http://database.prota.org/search.htm">http://database.prota.org/search.htm</a> . Accessed 5 May 2012.	1. Flowers are pollinated by insects.
6.06	1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland ( <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948</a> [Accessed: 5 May 2012])	1. No vegetative spread rate; not propagated by cuttings or sprigs.
6.07	1. Duke, J.A. 1983. <i>Handbook of Energy Crops</i> . Unpublished. Web. <a href="http://www.hort.purdue.edu/newcrop/default.html">http://www.hort.purdue.edu/newcrop/default.html</a> . Accessed 13 February 2012. 2. Orwa, C. et al. 2009. Agroforestry Database: A tree refernece and selection guide. Version 4.0. <a href="http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp">http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp</a> . PDF.	1. Starts fruiting as early as year 4 in Malaysia. 2. Under optimal conditions flowering will begin by the end of the 3rd growing season, but more commonly when they are 5 years old.
7.01		
7.02	1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland ( <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948</a> [Accessed: 5 May 2012]) and Duke, J.A. 1983. <i>Handbook of Energy Crops</i> . Unpublished. Web. <a href="http://www.hort.purdue.edu/newcrop/default.html">http://www.hort.purdue.edu/newcrop/default.html</a> . Accessed 13 February 2012. 2. Boland, D.J. et al. <i>Forest Trees of Australia</i> . 5th ed. Collingswood, Victoria, Australia: CSIRO, 2006. Print. 3. Little, Jr., E.L. <i>Common Fuelwood Crops, A Handbook for Their Identification</i> . Morgantown, WV: Communi-Tech Associates, 1983. 4. Orwa, C. et al. 2009. Agroforestry Database: A tree refernece and selection guide. Version 4.0. <a href="http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp">http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp</a> . PDF.	Species is being considered for introduction as a biomass crop. 1. Economic importance: wood, more (Duke 1983) general construction, utility poles, fencepoest, and firewood, ornamental honey-producing tree and windbreak. 2. Used mostly as round timber for fencing and wharf construction. 3. Fuelwood. 4. Apiculture, widely used as forewood and for charcoal, pulpwood, general construction, tannin or dyestuff, essential oil, and medicine (reported to have significant antimalarial activity); erosion control (Africa), shade or shelter, and ornamental.
7.03		

7.04	<p>1. Boland, D.J. et al. <i>Forest Trees of Australia</i> . 5th ed. Collingswood, Victoria, Australia: CSIRO, 2006. Print. 2. Little, Jr., E.L. <i>Common Fuelwood Crops, A Handbook for Their Identification</i> . Morgantown, WV: Communi-Tech Associates, 1983. 3. Orwa, C. et al. 2009. Agroforestry Database: A tree reference and selection guide. Version 4.0. <a href="http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp">http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp</a>. PDF. 4. Jiofack Tafokou, R.B., 2008. <i>Eucalyptus robusta</i> Sm. [Internet] Record from Protabase. Louppe, D., Oteng-Amoako, A.A. &amp; Brink, M. (Editors). PROTA (Plant Resources of Tropical Africa/Ressources végétales de l’Afrique tropicale), Wageningen, Netherlands. <a href="http://database.prota.org/search.htm">http://database.prota.org/search.htm</a>. Accessed 5 May 2012. 5. Potts, B. 1990. The response of eucalypt populations to a changing environment. <i>Tasforests</i>, December: 179-193. 6. Cremer, K.W. 1977. Distance of seed dispersal in Eucalypts estimated from seed weights. <i>Australian Forest Research</i>, 7(4): 225-228. 7. Rejmánek, M. &amp; D.M. Richardson. 2011. Eucalypts (203-209). In: D. Simberloff &amp; M. Rejmánek, eds. <i>Encyclopedia of Biological Invasions</i>. Berkeley: University of California Press.</p>	<p>No adaptations for wind dispersal (i.e., lacks wings). 1. Seeds, pyramidal, brown, hilum terminal. 2. Seeds tiny, dull light brown, 1-2 mm long. 3. Seed dispersal is largely by wind and may begin within 6 weeks after the capsule ripens (although there are no adaptations for wind dispersal described in the botanic description of this reference). 4. Seed dispersal is mainly by wind. 5. Seed dispersal in most eucalypt species is mainly by wind and gravity. 6. Wind is probably the only important agent of seed dispersal in the eucalypts, except possibly in species growing on river margins or flood plains where water could also transport the seed. 7. Relatively limited seed dispersal; planted eucalypts are very small and have no adaptations for dispersal (wings or fleshy). The passive release of seeds is undoubtedly aided by wind; however all rigorous studies of eucalypt seed dispersal and seedling spatial distribution show that in general seeds are dispersed over quite short distances that are in agreement with measurement of terminal descent velocity.</p>
7.05	<p>1. Orwa, C. et al. 2009. Agroforestry Database: A tree reference and selection guide. Version 4.0. <a href="http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp">http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp</a>. PDF. 2. Rejmánek, M. &amp; D.M. Richardson. 2011. Eucalypts (203-209). In D. Simberloff &amp; M. Rejmánek, eds. <i>Encyclopedia of Biological Invasions</i> . Berkeley: University of California Press.</p>	<p>1. Exceedingly tolerant to prolonged flooding, so it is extensively planted in swampy areas and along rivers and regenerates in areas flooded with fresh water. 2. Eucalypts should not be planted near rivers/streams. Temporarily flooded or eroded river/stream banks are suitable habitat for spontaneous establishment of seedlings. Additionally, their seeds can be dispersed for long distances by running water.</p>
7.06	<p>1. Southern, S.G. et al. 2004. Review of gene movement by bats and birds and its potential significance for eucalypt plantation forestry. <i>Australian Forestry</i> , 67(1): 44-53.</p>	<p>1. Dispersal in animal droppings does not occur, although many birds eat eucalypt seed, because the seed does not survive passage through the alimentary canal of mammals and birds (Joseph 1986).</p>
7.07	<p>1. Boland, D.J. et al. <i>Forest Trees of Australia</i> . 5th ed. Collingswood, Victoria, Australia: CSIRO, 2006. Print. 2. Little, Jr., E.L. <i>Common Fuelwood Crops, A Handbook for Their Identification</i> . Morgantown, WV: Communi-Tech Associates, 1983.</p>	<p>No adaptations that would suggest that it could attach itself externally to animals. 1. Seeds, pyramidal, brown, hilum terminal. 2. Seeds tiny, dull light brown, 1-2 mm long.</p>



7.08	1. Southern, S.G. et al. 2004. Review of gene movement by bats and birds and its potential significance for eucalypt plantation forestry. <i>Australian Forestry</i> , 67(1): 44-53.	1. Dispersal in animal droppings does not occur, although many birds eat eucalypt seed, because the seed does not survive passage through the alimentary canal of mammals and birds (Joseph 1986).
8.01	1. Jiofack Tafokou, R.B., 2008. <i>Eucalyptus robusta</i> Sm. [Internet] Record from Protabase. Louppe, D., Oteng-Amoako, A.A. & Brink, M. (Editors). PROTA (Plant Resources of Tropical Africa/Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. <a href="http://database.prota.org/search.htm">http://database.prota.org/search.htm</a> . Accessed 5 May 2012.	1. Fruit a thin-walled cylindrical to urn-shaped capsule (8–)10–18 mm × 6–11 (–12) mm, enclosed in a woody hypanthium, opening with 3–4 included to slightly exerted valves, many-seeded.
8.02	1. Rejmánek, M. & D.M. Richardson. 2011. Eucalypts (203-209). In D. Simberloff & M. Rejmánek, eds. <i>Encyclopedia of Biological Invasions</i> . Berkeley: University of California Press.	1. Eucalypt seeds do not have dormancy and seed storage in the soil lasts less than a year.
8.03	1. Rejmánek, M. & D.M. Richardson. 2011. Eucalypts (203-209). In D. Simberloff & M. Rejmánek, eds. <i>Encyclopedia of Biological Invasions</i> . Berkeley: University of California Press.	1. Triclopyr or glyphosate applied to freshly cut stumps can greatly reduce resprouting.
8.04	1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland ( <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948</a> [Accessed: 5 May 2012]). 2. Orwa, C. et al. 2009. Agroforestry Database: A tree reference and selection guide. Version 4.0. <a href="http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp">http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp</a> . PDF.	1. Coppice potential and resprout ability; fire tolerance is high. 2.a. Recovers well from fire, sending out shoots from small branches a few centimetres in diameter. 2.b. Coppices well up to the age of 25 years.
8.05		