

<i>Eucalyptus viminalis</i> (Manna gum, Ribbon gum, Rough-bark manna gum, White gum) -- FLORIDA		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 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)	y	1
2.04	Native or naturalized in regions with an average of 11-60 inches of annual precipitation	n	0
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	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	n	-1
4.05	Toxic to animals	?	
4.06	Host for recognised pests and pathogens	?	
4.07	Causes allergies or is otherwise toxic to humans	n	0
4.08	Creates a fire hazard in natural ecosystems	?	
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.	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	n	0
6.02	Produces viable seed	y	1
6.03	Hybridizes naturally	y	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)		

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	?	
7.06	Propagules bird dispersed	n	-1
7.07	Propagules dispersed by other animals (externally)	y	1
7.08	Propagules dispersed by other animals (internally)	n	-1
8.01	Prolific seed production		
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.		
	Total Score		9
	Implemented Pacific Second Screening		No
	Risk Assessment Results		Reject

	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	<p>1. PERAL NAPPFAST Global Plant Hardiness (http://www.nappfast.org/Plant_hardiness/NAPPFAST%20Global%20zones/10-year%20climate/PLANT_HARDINESS_10YR%20lgnd.tif) & USDA Plant Hardiness Zone Map, 2012. Agricultural Research Service, U.S. Department of Agriculture. Accessed from http://planthardiness.ars.usda.gov. 2. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland (http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948 [Accessed: 15 December 2011]). 3.a-b. "<i>Eucalyptus viminalis</i> ." hortocopia.com. Hortocopia, 2011. Web. 15 December 2011. 4. Duke, J.A. 1983. Handbook of Energy Crops. unpublished. http://www.hort.purdue.edu/newcrop/duke_energy/Eucalyptus_viminalis.html. Accessed: 22 December 2011.</p>	<p>No computer analysis was performed. 1. Global plant hardiness zones 8-10; equivalent to USDA Hardiness zones 7b-10b (north, central, south zones of Florida). 2. Distributional range: Native to eastern New South Wales, southeastern Queensland, southeastern South Australia, Tasmania, and Victoria Australia. 3.a. Hardy range: 9A-11. 3.b. Native habitat: New South Wales to Tasmania, Australia. 4. Native to Southeastern Australia, but cultivated in Argentina, California, Hawaii, India, Peru, et al.</p>
2.02		No computer analysis was performed. Native range is well known; refer to 2.01 source data.
2.03	<p>1. Köppen-Geiger climate map (http://www.hydrol-earth-syst-sci.net/11/1633/2007/hess-11-1633-2007.pdf). 2. http://ecocrop.fao.org/ecocrop/srv/en/home.</p>	<p>1. Distribution in the native and cultivated ranges is at least 3 climatic groups. 2. Climate zone: steppe or semiarid (Bs), subtropical humid (Cf), subtropical dry summer (Cs), subtropical dry winter (Cw), temperate oceanic (Do).</p>
2.04	<p>1. Commonwealth of Australia 2011, Bureau of Meteorology. http://www.bom.gov.au/climate/averages/maps.shtml. Accessed: 6 January 2012. 2. <i>Ecocrop</i>. Copyright 1993-2007. Food and Agriculture Organization of the United Nations. Web. 31 January 2012. http://ecocrop.fao.org/ecocrop/srv/en/home.</p>	<p>1. Australia: 400 - 1200 mm (11.8 - 47.2 in); California 0 - 1600 mm (0 - 45 in). 2. Optimal annual rainfall: 700 - 1500 mm (27.5 - 59 in); Absolute annual rainfall: 500 - 2500 mm (19.7 - 98.4 in).</p>

2.05	<p>1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland (http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948 [Accessed: 15 December 2011]). 2. The Global Compendium of Weeds: <i>Eucalyptus viminalis</i> (http://hear.org/gcw/html/index.html [Accessed: 15 December 2011]). 3. The Calflora Database. http://calflora.org. Accessed: 21 December 2011. 4. Duke, J.A. 1983. Handbook of Energy Crops. unpublished. http://www.hort.purdue.edu/newcrop/duke_energy/Eucalyptus_viminalis.html. Accessed: 22 December 2011.</p>	<p>1. Introduced (naturalized) in CA, HI. 2. Introduced (naturalized) Flora of Ecuador; Plants naturalized in Hawai'i. 3. Is not native to California; it was introduced from elsewhere and naturalized in the wild. 4. Cultivated in Argentina, California, Hawaii, India, Peru, et al.</p>
3.01	<p>1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland (http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948 [Accessed: 15 December 2011]). 2. The Global Compendium of Weeds: <i>Eucalyptus viminalis</i> (http://hear.org/gcw/html/index.html [Accessed: 15 December 2011]).</p>	<p>1. Introduced (naturalized) in CA, HI. 2. Introduced (naturalized) Flora of Ecuador; Plants naturalized in Hawai'i. 3. Is not native to California; it was introduced from elsewhere and naturalized in the wild.</p>
3.02	<p>1. Ritter, Matt. 2012 (v. 1.0). Jepson eFlora, [<i>Eucalyptus viminalis</i>], Jepson Flora Project. http://ucjeps.berkeley.edu/IJM.html [accessed on 10 February 2012].</p>	<p>1. Uncommon. Disturbed areas; < 100 m.</p>
3.03		<p>No evidence.</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>Species does not possess these described morphological features.</p>
4.02	<p>1. Anonymous. 2009. "Focus on Eucalypts." <i>SAPIA NEWS No. 12</i> . ARC-Plant Protection Research Institute, South Africa. 2. 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.</p>	<p>1. It is likely that most <i>Eucalypts</i> are allelopathic-having the potential to suppress understory plants through chemical inhibitors that leach into the soil. 2. 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 description of parasitism.
4.04	<p>1. Anonymous. Parks Victoria. Park Notes, Koala. parkweb.vic.gov.au. Accessed: 9 January 2012. 2.a-b. Anonymous. Corangamite Region Guidelines. <i>Eucalyptus viminalis</i> Manna Gum. http://ccma.vic.gov.au/publications/Uploaded/Speciesnotes-Eucalyptusviminalis.pdf. Accessed: 9 January 2012.</p>	<p>1. Koalas feed primarily on species such as Manna Gum (<i>Eucalyptus viminalis</i>). 2.a. A diet study of the Feathertail Glider (Turner 1984) indicated that eucalypt pollen was the most abundant item in faecal samples collected over a 2 year period. The individual eucalypt species the gliders fed on could not be identified but fifteen eucalypt species occurred in the study area, and included <i>E. viminalis</i>. 2.b. A foraging study (Goldingay and Kavanagh 1995) observed Feathertail Gliders feeding on a single Manna Gum but not on pollen.</p>
4.05	<p>1. Duke, J.A. 1983. Handbook of Energy Crops. unpublished. http://www.hort.purdue.edu/newcrop/duke_energy/Eucalyptus_viminalis.html. Accessed: 22 December 2011. 2. Vanselow, B.A. et al. 2011. Oxalate nephropathy in a laboratory colony of common marmoset monkeys (<i>Callithrix jacchus</i>) following the ingestion of <i>Eucalyptus viminalis</i>. <i>Veterinary Record</i> 169(4): 100-U46. 2. Anonymous. Parks Victoria. Park Notes, Koala. parkweb.vic.gov.au. Accessed: 9 January 2012. 3.a-b. Anonymous. Corangamite Region Guidelines. <i>Eucalyptus viminalis</i> Manna Gum. http://ccma.vic.gov.au/publications/Uploaded/Speciesnotes-Eucalyptusviminalis.pdf. Accessed: 9 January 2012.</p>	<p>1. The species is suspected to cause poisoning in koala bears, perhaps due to HCN (0.09% HCN has been reported) (Watt and Breyer-Brandwijk, 1962). 2. Koalas feed primarily on species such as Manna Gum (<i>Eucalyptus viminalis</i>). 3.a. A diet study of the Feathertail Glider (Turner 1984) indicated that eucalypt pollen was the most abundant item in faecal samples collected over a 2 year period. The individual eucalypt species the gliders fed on could not be identified but fifteen eucalypt species occurred in the study area, and included <i>E. viminalis</i>. 3.b. A foraging study (Goldingay and Kavanagh 1995) observed Feathertail Gliders feeding on a single Manna Gum but not on pollen.</p>

4.06	<p>1. Duke, J.A. 1983. Handbook of Energy Crops. unpublished. http://www.hort.purdue.edu/newcrop/duke_energy/Eucalyptus_viminalis.html. Accessed: 22 December 2011. 2. Carnegie, A.J. & P.J. Keane. 2003 Variation in severity of target spot, caused by <i>Aulographina eucalypti</i>, in a eucalypt species and provenance trial in Victoria. <i>Australasian Plant Pathology</i> 32(3): 393-402. 3. Hunter, G.C. et al. 2009. <i>Teratosphaeria nubilosa</i>, a serious leaf disease pathogen of <i>Eucalyptus</i> spp. in native and introduced areas. <i>Molecular Plant Pathology</i> 10(1): 1-14. 4. Anonymous. <i>Eucalyptus viminalis</i>. Shire of Yarra Ranges Streetscape Strategy, Street Tree Species List Information Sheet. Accessed: 6 January 2012. 5. Gilman, E. F. & D.G. Watson. 1993. <i>Eucalyptus ficifolia</i> Fact Sheet ST-239. Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida (http://hort.ifas.ufl.edu/trees/eucfica.pdf [Accessed: 8/20/2010]).</p>	<p>1. Browne (1968) reports the following as affecting this species: (Fungi) <i>Fomes robustus</i>, <i>F. setulosus</i>, <i>Inonotus chondromyelus</i>, <i>Phytophthora parasitica</i>, <i>Polyporus portentosus</i>, <i>P. zonatus</i>. (Coleoptera) <i>Entypotrachelus meyeri</i>, <i>Gonipterus scutellatus</i>, <i>Paropsis obsoleta</i>, <i>Phoracantha semipunctata</i>, <i>P. tricuspis</i>. (Hemiptera) <i>Eriococcus coriaceus</i>. (Lepidoptera) <i>Spilonota macropetana</i>. 2. Target spot caused by <i>Aulographina eucalypti</i> is one of the most common and distinctive leaf diseases in eucalypt forests and plantation in southeastern Australia, including <i>E. viminalis</i>. 3. <i>Teratosphaeria nubilosa</i>, is a primary pathogen of several <i>Eucalyptus</i> spp., including <i>E. viminalis</i>. 4. A range of defoliating insects can cause serious damage to this species particularly when young. Pests include eucalypt leaf beetle, scarab beetles, sawfly lava and leaf blister sawfly, this species is also a preferred host for Christmas beetles. 5. <i>Paropsis charybdis</i> is an Australian insect and was first recorded in New Zealand from the Port Hills, Christchurch, in 1916. Most species of <i>Eucalyptus</i> grown in New Zealand can be defoliated to some extent by this tortoise beetle but oviposition (egg laying), and consequent larval damage, is largely restricted to eucalypts in the sub-genus <i>Symphyomyrtus</i>, Section <i>Maidenaria</i>, e.g. <i>E. globulus</i>, <i>E. viminalis</i> and <i>E. nitens</i>. This insect is regarded as the most serious defoliator of eucalypts in New Zealand. Frequent and severe defoliation of <i>E. globulus</i>, <i>E. viminalis</i>, and <i>E. macarthuri</i> has virtually curtailed the planting of these species, thus resulting in an economic impact.</p>
4.07	<p>1. The Calflora Database. http://calflora.org. Accessed: 21 December 2011.</p>	<p>1. Toxicity: minor, dermatitis</p>
4.08	<p>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. 2. Gill, A.M. Eucalypts and fires: interdependent or independent? In: <i>Eucalypt ecology: individuals to ecosystems</i>. Ed. J.E. Williams & J. Woinarski. Cambridge, New York: Cambridge University Press, 1997. 3. PROTA (Plant Resources of Tropical Africa). <i>Timbers 1</i>. Ed. D. Louppe, A.A. Oteng-Amoako, M. Brink. Wageningen: Backhuys Publishers. 2008. Online.</p>	<p>1. Accumulated litter in dense eucalypt stands are extremely flammable. 2. <i>Eucalypts</i> often are the major source of fuel for fires, but not always. 3. <i>Eucalyptus viminalis</i> is resistant to fire.</p>

4.09	<p>1. "<i>Eucalyptus viminalis</i> ." hortycopia.com. Hortycopia, 2011. Web. 15 December 2011. 2. Anonymous. <i>Eucalyptus viminalis</i> . Shire of Yarra Ranges Streetscape Strategy, Street Tree Species List Information Sheet. Accessed: 6 January 2012. 3. 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.</p>	<p>1. Exposure: partial shade or partial sun to full sun. 2. Shade tolerance: intolerant, prefers full sun. 3. Shade-tolerant sub-canopy species are not known.</p>
4.10	<p>1. "<i>Eucalyptus viminalis</i> ." hortycopia.com. Hortycopia, 2011. Web. 15 December 2011. 2. Anonymous. <i>Eucalyptus viminalis</i> . Shire of Yarra Ranges Streetscape Strategy, Street Tree Species List Information Sheet. Accessed: 6 January 2012. 3. <i>Ecocrop</i> . Copyright 1993-2007. Food and Agriculture Organization of the United Nations. Web. 31 January 2012. http://ecocrop.fao.org/ecocrop/srv/en/home. 4. 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.</p>	<p>1. This plant will grow in very dry soil. Suitable soil is well-drained/loamy, sandy or clay. The pH preference is an acidic to alkaline (less than 6.8 to more than 7.7) soil. 2. Will grow in a range of soil and climatic conditions with high tolerance of heavy clays, winds and frosts. 3. <u>Optimal soil:</u> depth: deep (50 - 150 cm [19.7 - 59 in]), texture: medium, fertility: moderate, drainage: well (dry spells); <u>Absolute soil:</u> depth: medium (50 - 150 cm [19.7 - 59 in]), texture: heavy, medium, light, fertility: low, drainage: well (dry spells). 4. Eucalypts appealed to foresters because of their rapid growth, even on nutrient-poor soil.</p>
4.11	<p>1. The Royal Botanic Gardens and Domain Trust (19 December 2011). PlantNET - The Plant Information Network System of The Royal Botanic Gardens and Domain Trust, Sydney, Australia (version 2.0). http://plantnet.rbgsyd.nsw.gov.au. 2. "<i>Eucalyptus viminalis</i> ." hortycopia.com. Hortycopia, 2011. Web. 15 December 2011.</p>	<p>1. Family: <i>Myrtaceae</i> ; tree to 30 m high (sometimes 50 m high). 2. Tree between 60'-80'.</p>
4.12	<p>1. The Royal Botanic Gardens and Domain Trust (19 December 2011). PlantNET - The Plant Information Network System of The Royal Botanic Gardens and Domain Trust, Sydney, Australia (version 2.0). http://plantnet.rbgsyd.nsw.gov.au. 2. "<i>Eucalyptus viminalis</i> ." hortycopia.com. Hortycopia, 2011. Web. 15 December 2011.</p>	<p>1. Widespread and abundant. 2. Oval, upright or erect, and weeping</p>
5.01	<p>1. The Royal Botanic Gardens and Domain Trust (19 December 2011). PlantNET - The Plant Information Network System of The Royal Botanic Gardens and Domain Trust, Sydney, Australia (version 2.0). http://plantnet.rbgsyd.nsw.gov.au. 2. Boland, D.J. et al. <i>Forest Trees of Australia</i> . 5th ed. Collingswood, Victoria, Australia: CSIRO, 2006. Print.</p>	<p>1. In grassy woodland or forest. 2. Grows on coastal flats to mountains and tablelands, valleys of hilly and mountainous country; subspecies can occur on sandy soils alongs creeks.</p>

5.02	1. The Royal Botanic Gardens and Domain Trust (19 December 2011). PlantNET - The Plant Information Network System of The Royal Botanic Gardens and Domain Trust, Sydney, Australia (version 2.0). http://plantnet.rbg Syd.nsw.gov.au .	1. Family: <i>Myrtaceae</i> .
5.03	1. The Royal Botanic Gardens and Domain Trust (19 December 2011). PlantNET - The Plant Information Network System of The Royal Botanic Gardens and Domain Trust, Sydney, Australia (version 2.0). http://plantnet.rbg Syd.nsw.gov.au .	1. Family: <i>Myrtaceae</i> .
5.04	1. The Royal Botanic Gardens and Domain Trust (19 December 2011). PlantNET - The Plant Information Network System of The Royal Botanic Gardens and Domain Trust, Sydney, Australia (version 2.0). http://plantnet.rbg Syd.nsw.gov.au . 2. " <i>Eucalyptus viminalis</i> ." horticultura.com. Horticultura, 2011. Web. 15 December 2011.	1. Family: <i>Myrtaceae</i> ; tree to 30 m high (sometimes 50 m high). 2. Tree between 60'-80'.
6.01		
6.02	1. " <i>Eucalyptus viminalis</i> ." florabank.org.au. Florabank, 2011. Web. 21 December 2011. 2. Anonymous. Corangamite Region Guidelines. <i>Eucalyptus viminalis</i> Manna Gum. http://ccma.vic.gov.au/publications/Uploaded/Speciesnotes-Eucalyptusviminalis.pdf . Accessed: 9 January 2012. 3. 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. There are about 300 viable seeds per gram. 2. Regenerates from seed during wet summers, especially when there is a lack of competition from exotic grasses and weeds. 3. Eucalypt breeding system is of mixed mating with preferential outcrossing.
6.03	1. Barbourm R.C. et al. 2003. Gene flow between introduced and native <i>Eucalyptus</i> species: exotic hybrids and establishing in the wild. <i>Australian Journal of Botany</i> 51(4): 429-439. 2. Anonymous. Corangamite Region Guidelines. <i>Eucalyptus viminalis</i> Manna Gum. http://ccma.vic.gov.au/publications/Uploaded/Speciesnotes-Eucalyptusviminalis.pdf . Accessed: 9 January 2012.	1. Natural hybridization between <i>E. ovata</i> and <i>E. viminalis</i> has been previously recorded in the literature (Williams and Potts 1996). 2. <i>Eucalyptus viminalis</i> can hybridize with at least 38 other eucalyptus species. For example, with <i>E. ovata</i> , <i>E. aromaphloia</i> (Ladiges & Ashton, 1974) and <i>E. camaldulensis</i> (Griffin et al 1988). Hybridizes extensively with <i>E. goniocalyx</i> . Correct provenance is essential (GAV undated).
6.04	1. Anonymous. Corangamite Region Guidelines. <i>Eucalyptus viminalis</i> Manna Gum. http://ccma.vic.gov.au/publications/Uploaded/Speciesnotes-Eucalyptusviminalis.pdf . Accessed: 9 January 2012. 2. 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. Eucalypts self and outcross. 2. Eucalypt breeding system is of mixed mating with preferential outcrossing.

6.05	1. Anonymous. Corangamite Region Guidelines. <i>Eucalyptus viminalis</i> Manna Gum. http://ccma.vic.gov.au/publications/Uploaded/Speciesnotes-Eucalyptusviminalis.pdf . Accessed: 9 January 2012. 2. 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. Birds such as Red Wattlebird, Yellow-tufted Honeyeater and White-plumed Honeyeater take nectar from flowers (Earl et al 2001). Birds, bees, insects (Bonney 2003). Small mammals (Feathertail glider, Sugar glider & Eastern Pygmy-possum known to pollinate <i>Eucalyptus</i> spp. [Turner, 1982]). 2. Eucalypts generally don't need special pollinators. They are pollinated mostly by bees, wasps, and to lesser extents, birds, mammals, and wind.
6.06		
6.07	1. Anonymous. <i>Eucalyptus viminalis</i> . Shire of Yarra Ranges Streetscape Strategy, Street Tree Species List Information Sheet. Accessed: 6 January 2012.	1. Growth rate: Fast growing
7.01		
7.02	1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland (http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?15948 [Accessed: 15 December 2011]). 2. Duke, J.A. 1983. Handbook of Energy Crops. unpublished. http://www.hort.purdue.edu/newcrop/duke_energy/Eucalyptus_viminalis.html . Accessed: 22 December 2011. 3. Cappa, E.P. et al. 2010. Provenance variation and genetic parameters of <i>Eucalyptus viminalis</i> in Argentina. <i>Tree Genetics & Genomes</i> , 6: 981-994.	1. Economic importance: materials, wood. 2. Cultivated in Argentina, California, Hawaii, India, Peru, et al. 3. Given the good growth rates, adequate frost resistance, and high-quality wood for pulp and fiber board, <i>E. viminalis</i> has become a favorite species for planting.
7.03		
7.04	1. Anonymous. Corangamite Region Guidelines. <i>Eucalyptus viminalis</i> Manna Gum. http://ccma.vic.gov.au/publications/Uploaded/Speciesnotes-Eucalyptusviminalis.pdf . Accessed: 9 January 2012. 2. Potts, B. 1990. The response of eucalypt populations to a changing environment. <i>Tasforests</i> , December: 179-193. 3. Cremer, K.W. 1977. Distance of seed dispersal in Eucalypts estimated from seed weights. <i>Australian Forest Research</i> , 7(4): 225-228. 4. 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. Seed is carried by wind. 2. Seed dispersal in most eucalypt species is mainly by wind and gravity. 3. 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. 4. 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.
7.05	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. 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.

7.06	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).
7.07	1. Anonymous. Corangamite Region Guidelines. <i>Eucalyptus viminalis</i> Manna Gum. http://ccma.vic.gov.au/publications/Uploaded/Speciesnotes-Eucalyptusviminalis.pdf . Accessed: 9 January 2012.	1. Seed is carried by ants.
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. Anonymous. Corangamite Region Guidelines. <i>Eucalyptus viminalis</i> Manna Gum. http://ccma.vic.gov.au/publications/Uploaded/Speciesnotes-Eucalyptusviminalis.pdf . Accessed: 9 January 2012.	1. Prolific crops every 2 to 3 years. Seeds released 3-8 weeks after maturity. Seed can be collected throughout the year. In warm weather it is released rapidly. (Bonney 2003)
8.02	1. " <i>Eucalyptus viminalis</i> ." florabank.org.au. Florabank, 2011. Web. 21 December 2011. 2. Clarke, P.J. & E.A. Davison. 2001. Experiments on the mechanism of tree and shrub establishment in temperate grassy woodlands: Seedling emergence. <i>Austral Ecology</i> 26(4): 400-412. 3. 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. Seed capsules persist on trees until at least the following summer. 2. Canopy-held seed bank. 3. 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. Anonymous. Corangamite Region Guidelines. <i>Eucalyptus viminalis</i> Manna Gum. http://ccma.vic.gov.au/publications/Uploaded/Speciesnotes-Eucalyptusviminalis.pdf . Accessed: 9 January 2012.	1. Coppices from cut stumps and can regenerate from lignotubers after fire (Earl et al 2001).
8.05		