

<i>Moringa oleifera</i> (Ben-Oil-Tree, Benzolive-Tree, Drumsticktree, Horseradish-Tree, Moringa, West Indian Ben) -- 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	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	n	0
3.05	Congeneric weed	n	0
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	?	
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		
6.02	Produces viable seed	y	1
6.03	Hybridizes naturally	?	
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)	1	1

7.01	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	n	-1
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	y	1
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)	?	
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.		
	Total Score		9
	Implemented Pacific Second Screening		No
	Risk Assessment Results		Reject

	Reference	Source data
1.01		Widely 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 (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/taxgenform.pl?language=en (02 July 2012). 3. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i> . Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).	No computer analysis was performed. 1. Global plant hardiness zones 9-10; equivalent to USDA Hardiness zones 8b-9b (north, central, & [south?] zones of Florida). 2. Native distributional range: India (north) and Pakistan (perhaps only cultivated). 3. Indigenous to south Asia, from the Himalayan foothills to northern West Bengal (India).
2.02		No computer analysis was performed. 1. Native range is well known; refer to 2.01 source data.
2.03	1. Köppen-Geiger climate map (http://www.hydrol-earth-syst-sci.net/11/1633/2007/hess-11-1633-2007.pdf).	1. Native distribution appears to be in at least three climatic groups (BSh, Cwa, Cwb), possibly one other climatic group (BWh).
2.04	1. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i> . Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).	1. Annual rainfall ranges from 750-2200 mm (29.5"-86.6").

2.05	<p>1. USDA, NRCS. 2012. The PLANTS Database (http://plants.usda.gov, 25 June 2012). National Plant Data Team, Greensboro, NC 27401-4901 USA. 2. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm>. Accessed 25 June 2012. 3. Kairo, M. et al. 2003. Invasive Species Threats in the Caribbean Region - Report to The Nature Conservancy. CAB International, Curepe, Trinidad and Tobago & Egham, UK. 4. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i> . Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).</p>	<p>1. Present in Florida, Puerto Rico, Virgin Islands. 2. Has been introduced throughout the tropics and subtropics. 3. Exotic in Haiti and Puerto Rico. 4. It has been introduced in other parts of India, Pakistan, Afghanistan, Bangladesh, Sri Lanka, Southeast Asia, west Asia, the Arabian peninsula, east and west Africa, southern Florida, throughout the West Indies, and from Mexico to Peru, Paraguay, and Brazil.</p>
3.01	<p>1. Pacific Island Ecosystems at Risk (PIER). Global Compendium of Weeds. http://www.hear.org. Accessed 25 June 2012 via: Hosking, J. NSW Department of Agriculture, Weed Database. 30 April 2003. 2. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm>. Accessed 25 June 2012. 3. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i> . Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).</p>	<p>1. Naturalized in Australia (New South Wales, Queensland), Belize, (at least one) Caribbean territory, Costa Rica, Federated States of Micronesia (Pohnpei), Puerto Rico, United States. 2. Has become naturalized in many African countries. 3. It has been introduced and become naturalized in other parts of India, Pakistan, Afghanistan, Bangladesh, Sri Lanka, Southeast Asia, west Asia, the Arabian peninsula, east and west Africa, southern Florida, throughout the West Indies, and from Mexico to Peru, Paraguay, and Brazil.</p>
3.02	<p>1. Pacific Island Ecosystems at Risk (PIER). Global Compendium of Weeds. http://www.hear.org. Accessed 25 June 2012 via: Hosking, J. NSW Department of Agriculture, Weed Database. 30 April 2003.</p>	<p>1. Considered a weed/casual alien/cultivation escape in Africa (Burundi, Democratic Republic of the Congo, Rwanda), Florida, Hawaii, Puerto Rico.</p>
3.03		No evidence.
3.04		No evidence.
3.05		No evidence.
4.01		No description of these traits.
4.02		
4.03	<p>1. USDA, NRCS. 2012. The PLANTS Database (http://plants.usda.gov, 2 July 2012). National Plant Data Team, Greensboro, NC 27401-4901 USA.</p>	<p>1. Family: <i>Moringaceae</i> (not a parasitic family).</p>

4.04	1. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm >. Accessed 25 June 2012.	1. Leaves are eaten by livestock, especially goats, camels, and donkeys.
4.05	1. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm >. Accessed 25 June 2012.	1. Seed cake is unsuitable as animal feed because of the high content of alkaloids and saponins.
4.06	1. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm >. Accessed 25 June 2012. 2. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i> . Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).	1. In Niger caterpillars are the main pest. The tree is not seriously affected by diseases in India. Root-rot, related to poor drainage and caused by <i>Diplodia</i> sp., has been observed. Other pests include aphids, a scale insect, a borer and a fruit fly. 2. Not affected by any serious disease in its native or introduced ranges; however, <i>M. oleifera</i> is a collateral host of <i>Leveillula taurica</i> , a powdery mildew that causes serious damage in papaya nurseries in south India.
4.07	1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/taxgenform.pl?language=en (02 July 2012). 2. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm >. Accessed 25 June 2012.	1. Uses: Environmental (boundary/barrier/support, ornamental, shade/shelter); Human food (beverage base, fruit, oil/fat, seeds, vegetable). 2. Leaves, fruit, and sometimes flowers are consumed; tuberous root can be a substitute for horseradish. Seeds (pounded or whole) and seed cake (residue from oil extraction) are used to purify water. Oil can be used for cooking, in hair-dressing, as a lubricant, and in the perfume industry.
4.08		
4.09	1. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm >. Accessed 25 June 2012.	1. If planted in the dry season half-shade should be provided.

4.10	<p>1. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm>. Accessed 25 June 2012. 2. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i> . Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).</p>	<p>1. Wide range of soils but fertile, well-drained soils are most suitable. 2. Native range on sandy or gravelly alluvium (generally well-drained and often low in organic matter).</p>
4.11	<p>1. USDA, NRCS. 2012. The PLANTS Database (http://plants.usda.gov, 2 July 2012). National Plant Data Team, Greensboro, NC 27401-4901 USA. 2. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm>. Accessed 25 June 2012.</p>	<p>1. Family: <i>Moringaceae</i> ; tree/shrub growth habit. 2. Deciduous to semi-evergreen shrub or small tree up to 10 m (32.8') tall.</p>
4.12	<p>1. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm>. Accessed 25 June 2012.</p>	<p>1. Deciduous to semi-evergreen shrub or small tree up to 10 m (32.8') tall.</p>
5.01	<p>1. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i> . Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).</p>	<p>1. Grows in secondary dry tropical deciduous forests at elevations up to approximately 1400 m (4593') along the larger rivers of its native range on sandy or gravelly alluvium.</p>
5.02	<p>1. USDA, NRCS. 2012. The PLANTS Database (http://plants.usda.gov, 2 July 2012). National Plant Data Team, Greensboro, NC 27401-4901 USA.</p>	<p>1. Family: <i>Moringaceae</i> .</p>
5.03	<p>1. USDA, NRCS. 2012. The PLANTS Database (http://plants.usda.gov, 2 July 2012). National Plant Data Team, Greensboro, NC 27401-4901 USA.</p>	<p>1. Family: <i>Moringaceae</i> .</p>
5.04	<p>1. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i> . Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).</p>	<p>1. Trees grown from seed form a deep, stout taproot; trees grown from cuttings do not.</p>
6.01		

6.02	1. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm >. Accessed 25 June 2012.	1. Germination rates for fresh seeds are around 80%.
6.03	1. Kanthaswamy, V. 2005. Studies on pollination and breeding behaviour in moringa (<i>Moringa oleifera</i> Lam). <i>Vegetable Science</i> , 32(2): 187-188. 2. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm >. Accessed 25 June 2012.	Verification of natural conditions is needed. 1. Pollination and flowering were studied in <i>M. oleifera</i> cultivars PKM1 and PKM2 grown in India during the summer and rainy seasons. Fruit set percentage reached 32.0% in PKM1 and 36.0% in PKM2 under natural crossing. 2. No breeding work has been undertaken in Africa. In India a short-stem type of <i>Moringa oleifera</i> , released as PKM1, has also been developed for the production of immature fruits. Many farmers grow this type as an annual (two harvests per year). For Africa the most important selection criteria would be high leaf yield, whereas selection and breeding have so far concentrated on optimizing fruit yield. There is potential for hybridization with other <i>Moringa</i> species. <i>Moringa stenopetala</i> contains flocculating agents similar to those in <i>Moringa oleifera</i> and produces bigger seeds, so it may be possible to increase yields by hybridization with this species. It may be possible to increase the oil yield of <i>Moringa oleifera</i> by producing hybrids with <i>Moringa peregrina</i> (Forssk.) Fiori, which has higher oil content (c. 50%). So far, no results of hybridization trials have been published.
6.04	1. Kanthaswamy, V. 2005. Studies on pollination and breeding behaviour in moringa (<i>Moringa oleifera</i> Lam). <i>Vegetable Science</i> , 32(2): 187-188.	Verification of natural conditions is needed. 1. Pollination and flowering were studied in <i>M. oleifera</i> cultivars PKM1 and PKM2 grown in India during the summer and rainy seasons. Fruit set percentage reached 16.0% in PKM1 and 24.0% in PKM2 under natural selfing.
6.05	1. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i> . Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).	1. Bees and other insects, and birds are the principal pollinators.
6.06		

6.07	<p>1. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm>. Accessed 25 June 2012. 2. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i>. Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).</p>	<p>1. Trees raised from seed start flowering after 2 years; trees grown from cuttings the first fruits may be observed 6-12 months after planting.</p>
7.01	<p>1. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm>. Accessed 25 June 2012.</p>	<p>No adaptations that would suggest that it could attach itself. 1. Fruit an elongate 3-valved capsule 10-50 cm (4"-20") long, 9-ribbed, brown when ripe, many seeded. Seeds globose, 1-1.5 cm (0.4"-0.6") in diameter, with 3 thin wings 0.5-2.5 cm (0.2"-1.0") long.</p>
7.02	<p>1. USDA/ARS-GRIN [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/taxgenform.pl?language=en (02 July 2012).</p>	<p>Species is being considered for introduction as a biomass crop. 1. Environmental (boundary/barrier/support, ornamental, shade/shelter); Human food (beverage base, fruit, oil/fat, seeds, vegetable); Fuels (potential as petroleum substitute/alcohol); Materials (fiber, gum/resin, lipids, folklore).</p>
7.03	<p>1. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm>. Accessed 25 June 2012.</p>	<p>1. Alley cropping in the wet season cereals are grown, in the dry season vegetables.</p>
7.04	<p>1. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm>. Accessed 25 June 2012. 2. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i>. Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).</p>	<p>1. Fruit an elongate 3-valved capsule 10-50 cm (4"-20") long, 9-ribbed, brown when ripe, many seeded. Seeds globose, 1-1.5 cm (0.4"-0.6") in diameter, with 3 thin wings 0.5-2.5 cm (0.2"-1.0") long. 2. Mature seed pods remain on the tree for several months before splitting open and releasing the seeds, which are dispersed by wind, water, and probably by animals.</p>

7.05	1. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i> . Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).	1. Mature seed pods remain on the tree for several months before splitting open and releasing the seeds, which are dispersed by wind, water, and probably by animals.
7.06		No evidence.
7.07	1. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm >. Accessed 25 June 2012.	No adaptations that would suggest that it could attach itself. 1. Fruit an elongate 3-valved capsule 10-50 cm (4"-20") long, 9-ribbed, brown when ripe, many seeded. Seeds globose, 1-1.5 cm (0.4"-0.6") in diameter, with 3 thin wings 0.5-2.5 cm (0.2"-1.0") long.
7.08	1. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i> . Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).	1. Mature seed pods remain on the tree for several months before splitting open and releasing the seeds, which are dispersed by wind, water, and probably by animals.
8.01	1. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i> . Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61).	1. Fruit yield is low the first 2 years, but by the third year a single tree can yield 600-1600 or more fruits per year.
8.02	1. Parrotta, J.A. 1993. <i>Moringa oleifera</i> Lam. Reseda, horseradish tree. <i>Moringaceae</i> . Horseradish tree family. USDA Forest Service, International Institute of Tropical Forestry; (SO-ITF-SM-61). 2. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm >. Accessed 25 June 2012.	1.a. Seeds do not retain their viability in storage for longer than 2 months. 1.b. Seed predation by an unidentified insect is often heavy. 2. Stored seeds are susceptible to insect damage and require protective measures.
8.03		
8.04	1. Bosch, C.H., 2004. <i>Moringa oleifera</i> Lam. [Internet] Record from Protabase. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. < http://database.prota.org/search.htm >. Accessed 25 June 2012.	1. Pollarding, coppicing, and lopping or pruning are recommended to promote branching, increase production, and facilitate harvesting.
8.05		