

Taxon: Magnolia wilsonii	Family: Magnoliaceae
Common Name(s): Wilson's magnolia	Synonym(s): Magnolia nicholsoniana Rehder & E. Magnolia parviflora var. wilsonii Magnolia taliensis W. W. Sm. Magnolia wilsonii f. taliensis (W. W. Oyama wilsonii (Finet & Gagnep.)

Assessor: Assessor	Status: Assessor Approved	End Date: 31 Mar 2014
WRA Score: -3.0	Designation: L	Rating: Low Risk

Keywords: Temperate Tree, Ornamental, Fragrant Flowers, Endangered, Bird-dispersed

Qsn #	Question	Answer Option	Answer
101	Is the species highly domesticated?	y=-3, n=0	n
102	Has the species become naturalized where grown?		
103	Does the species have weedy races?		
201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"	(0-low; 1-intermediate; 2-high) (See Appendix 2)	Low
202	Quality of climate match data	(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
203	Broad climate suitability (environmental versatility)		
204	Native or naturalized in regions with tropical or subtropical climates	y=1, n=0	n
205	Does the species have a history of repeated introductions outside its natural range?	y=-2, ?=-1, n=0	y
301	Naturalized beyond native range	y = 1*multiplier (see Appendix 2), n= question 205	n
302	Garden/amenity/disturbance weed	n=0, y = 1*multiplier (see Appendix 2)	n
303	Agricultural/forestry/horticultural weed	n=0, y = 2*multiplier (see Appendix 2)	n
304	Environmental weed		
305	Congeneric weed	n=0, y = 1*multiplier (see Appendix 2)	n
401	Produces spines, thorns or burrs	y=1, n=0	n
402	Allelopathic		
403	Parasitic	y=1, n=0	n
404	Unpalatable to grazing animals		
405	Toxic to animals	y=1, n=0	n
406	Host for recognized pests and pathogens		
407	Causes allergies or is otherwise toxic to humans	y=1, n=0	n

Qsn #	Question	Answer Option	Answer
408	Creates a fire hazard in natural ecosystems	y=1, n=0	n
409	Is a shade tolerant plant at some stage of its life cycle	y=1, n=0	y
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y=1, n=0	y
411	Climbing or smothering growth habit	y=1, n=0	n
412	Forms dense thickets	y=1, n=0	n
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	n
503	Nitrogen fixing woody plant	y=1, n=0	n
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	y=1, n=0	n
601	Evidence of substantial reproductive failure in native habitat		
602	Produces viable seed	y=1, n=-1	y
603	Hybridizes naturally		
604	Self-compatible or apomictic		
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	n
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	>3
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	n
702	Propagules dispersed intentionally by people	y=1, n=-1	y
703	Propagules likely to disperse as a produce contaminant	y=1, n=-1	n
704	Propagules adapted to wind dispersal	y=1, n=-1	n
705	Propagules water dispersed	y=1, n=-1	n
706	Propagules bird dispersed	y=1, n=-1	y
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	y
801	Prolific seed production (>1000/m ²)		
802	Evidence that a persistent propagule bank is formed (>1 yr)		
803	Well controlled by herbicides		
804	Tolerates, or benefits from, mutilation, cultivation, or fire		
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)		

Supporting Data:

Qsn #	Question	Answer
101	Is the species highly domesticated?	n
	Source(s)	Notes
	McNamara, W.A. 2010. <i>Magnolia wilsonii</i> . The Quarryhill Quarterly 7(1): 3-4	"...an endangered tree native to China occurring in western Sichuan, northern Yunnan and western Guizhou." ... " <i>Magnolia wilsonii</i> is in a curious group of four magnolias in the section Oyama. In fact, recently some botanists have placed them in the newly created genus Oyama (Nakai) N.H. Xia & C.Y. Wu, though here at Quarryhill we have no intention of making this change." [No evidence]
102	Has the species become naturalized where grown?	
	Source(s)	Notes
	WRA Specialist. 2014. Personal Communication	NA
103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. 2014. Personal Communication	NA
201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"	Low
	Source(s)	Notes
	Sarker, S.D. & Maruyama, Y. (eds.). 2003. <i>Magnolia: The Genus Magnolia</i> . Taylor & Francis, London, UK	"Table 6.1. Geographical distribution of <i>Magnolia</i> " ... [<i>M. wilsonii</i> found in Temperate Asia & China]
202	Quality of climate match data	High
	Source(s)	Notes
	Sarker, S.D. & Maruyama, Y. (eds.). 2003. <i>Magnolia: The Genus Magnolia</i> . Taylor & Francis, London, UK	
203	Broad climate suitability (environmental versatility)	
	Source(s)	Notes
	Wu, Z.Y., Raven, P.H. & Hong, D.Y. (eds.). 2008. <i>Flora of China</i> . Vol. 7 (Menispermaceae through Capparaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	"Forests; 1900–3000 m. Guizhou, C and W Sichuan, N Yunnan." [A temperate climate species with an elevation range that exceeds 1000 m. Potentially environmentally versatile, but may only be able to thrive at higher elevations in the tropics]
	Missouri Botanical Garden. 2014. <i>Magnolia wilsonii</i> . http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=d341 . [Accessed 30 Mar 2014]	"Plants grow well in the Pacific northwest, but will struggle in the St. Louis climate." [Suggests climate limitations]

Qsn #	Question	Answer
204	Native or naturalized in regions with tropical or subtropical climates	n
	Source(s)	Notes
	USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: http://www.ars-grin.gov/ . [Accessed 30 Mar 2014]	"Native: ASIA-TEMPERATE China: China - Guizhou, Sichuan, Yunnan [n.]"
	Missouri Botanical Garden. 2014. <i>Magnolia wilsonii</i> . http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=d341 . [Accessed 30 Mar 2014]	"Zone: 6 to 9"

Qsn #	Question	Answer
205	Does the species have a history of repeated introductions outside its natural range?	y
	Source(s)	Notes
	Missouri Botanical Garden. 2014. <i>Magnolia wilsonii</i> . http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=d341 . [Accessed 30 Mar 2014]	"May be difficult to find in commerce."
	Dave's Garden. 2014. PlantFiles: Wilson's Magnolia - <i>Magnolia wilsonii</i> . http://davesgarden.com/guides/pf/go/142911/ . [Accessed 31 Mar 2014]	"This gorgeous tree is growing successfully in southeastern Massachusetts." ... "his plant has been said to grow in the following regions: Bellevue, Washington Shoreline, Washington"
	The Royal Horticultural Society. 2014. <i>Magnolia wilsonii</i> AGM. http://apps.rhs.org.uk/plantselector/plant?plantid=1227 . [Accessed 31 Mar 2014]	Cultivated in the UK

Qsn #	Question	Answer
301	Naturalized beyond native range	n
	Source(s)	Notes
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	No evidence

Qsn #	Question	Answer
302	Garden/amenity/disturbance weed	n
	Source(s)	Notes
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	No evidence

Qsn #	Question	Answer
303	Agricultural/forestry/horticultural weed	n
	Source(s)	Notes
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	No evidence

304	Environmental weed	
	Source(s)	Notes
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	No evidence

305	Congeneric weed	n
	Source(s)	Notes
	Richardson, D. M., & Rejmánek, M. 2011. Trees and shrubs as invasive alien species—a global review. <i>Diversity and Distributions</i> , 17(5): 788-809	"Many large, particularly tropical, woody genera are clearly under-represented. Examples (with number of known invasive species/total number of species) ..." ... "Magnolia (0/220)" [This publication reports no invasive Magnolia spp.]
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	Several Magnolia species are listed as naturalized

401	Produces spines, thorns or burrs	n
	Source(s)	Notes
	Wu, Z.Y., Raven, P.H. & Hong, D.Y. (eds.). 2008. <i>Flora of China</i> . Vol. 7 (Menispermaceae through Capparaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	" <i>Oyama wilsonii</i> " ... "Shrubs or small trees, rarely to 8 m tall. Bark grayish brown, conspicuously lenticellate. Old twigs gray; annual twigs purplish red, at first brown villous. Stipular scar 4/5–5/6 as long as petiole. Petiole (0.5–)1–3(–5) cm, densely brown villous; leaf blade elliptic-ovate to oblong-ovate, 6.5–12(–20) × 3–5(–8) cm, papery, abaxially silvery gray appressed villous, adaxially grayish yellow pubescent along midvein and secondary veins, trichomes on midvein and secondary veins usually brown, base rounded to sometimes slightly cordate, apex acute to acuminate."

402	Allelopathic	
	Source(s)	Notes

Qsn #	Question	Answer
	Abdelgaleil, S. A., & Hashinaga, F. 2007. Allelopathic potential of two sesquiterpene lactones from <i>Magnolia grandiflora</i> L. <i>Biochemical Systematics and Ecology</i> , 35 (11), 737-742	[Unknown for <i>Magnolia wilsonii</i> . Allelopathic properties present in other members of the genus] "The allelopathic effects of the two sesquiterpene lactones, costunolide and parthenolide, isolated from the leaves of <i>Magnolia grandiflora</i> L. were evaluated on the wheat (<i>Triticum aestivum</i> L.), lettuce (<i>Lactuca sativa</i> L.), radish (<i>Raphanus sativus</i> L.) and onion (<i>Allium cepa</i> L.). Seed germination of the test species was significantly reduced at 500 mg/ml by both compounds. Both sesquiterpenes showed pronounced inhibition of root length of the test species and the inhibitory effect was concentration-dependent. In addition, shoot growth of the four species was significantly inhibited at all the concentrations tested (10e500 mg/ml). Parthenolide reduced germination and inhibited seedling growth more than costunolide. Inhibition of root growth was generally greater than that of shoot growth. The results encourage the use of these sesquiterpenes as models for development of new herbicides."

403	Parasitic	n
	Source(s)	Notes
	Wu, Z.Y., Raven, P.H. & Hong, D.Y. (eds.). 2008. <i>Flora of China</i> . Vol. 7 (Menispermaceae through Capparaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	" <i>Oyama wilsonii</i> " ... "Shrubs or small trees, rarely to 8 m tall." [Magnoliaceae]

404	Unpalatable to grazing animals	
	Source(s)	Notes
	Forestfarm at Pacifica. 2014. <i>Magnolia wilsonii</i> - Wilson's Magnolia. <i>Magnolia wilsonii</i> - Wilson's Magnolia	"Plant Uses: Fragrant Plants; Deer Resistant; Small Flowering Tree; Street Tree; Shade Trees; Likes Shade;" [Deer resistant. Possibly unpalatable]

405	Toxic to animals	n
	Source(s)	Notes
	Wagstaff, D.J. 2008. <i>International poisonous plants checklist: an evidence-based reference</i> . CRC Press, Boca Raton, FL	No evidence in genus

406	Host for recognized pests and pathogens	
	Source(s)	Notes
	Missouri Botanical Garden. 2014. <i>Magnolia wilsonii</i> . http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=d341 . [Accessed 30 Mar 2014]	"No serious insect or disease problems. Late frosts may damage flowers."
	The Royal Horticultural Society. 2014. <i>Magnolia wilsonii</i> AGM. http://apps.rhs.org.uk/plantselector/plant?plantid=1227 . [Accessed 31 Mar 2014]	"Pests - May be damaged by horse chestnut scale, snails and capsid bug" ... "Diseases - May be affected by coral spot, grey mould, honey fungus, a virus and fungal leaf spot"

Qsn #	Question	Answer
	Shoot Gardening. 2014. <i>Magnolia wilsonii</i> (Wilson magnolia). http://www.shootgardening.co.uk/plant/magnolia-wilsonii . [Accessed 31 Mar 2014]	"Specific pests: Capsid bug , Horse chestnut scale , Snails Diseases: Generally disease-free"

407	Causes allergies or is otherwise toxic to humans	n
	Source(s)	Notes
	Wagstaff, D.J. 2008. International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL	No evidence in genus

408	Creates a fire hazard in natural ecosystems	n
	Source(s)	Notes
	McNamara, W.A. 2010. <i>Magnolia wilsonii</i> . The Quarryhill Quarterly 7(1): 3-4	"It is found in mixed forests between 1900 and 3300 meters elevation. Much of its habitat, once one of the richest temperate forests on earth, has been reduced to small areas too steep to clear for agriculture." [No evidence, and not from a fire-prone or fire-adapted ecosystem]

409	Is a shade tolerant plant at some stage of its life cycle	y
	Source(s)	Notes
	Great Plant Picks. 2014. Great Plant Picks. Great Plant Picks	" <i>Magnolia wilsonii</i> is a shade-tolerant, broad-spreading, multistemmed tree." ... "It flowers best when planted in full sun to light or open shade."
	Missouri Botanical Garden. 2014. <i>Magnolia wilsonii</i> . http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=d341 . [Accessed 30 Mar 2014]	"Sun: Full sun to part shade" ... "Best grown in moist, slightly acidic, organically rich, well-drained loams in full sun to part shade. Part shade may be best in hot summer climates."

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y
	Source(s)	Notes
	The Royal Horticultural Society. 2014. <i>Magnolia wilsonii</i> AGM. http://apps.rhs.org.uk/plantselector/plant?plantid=1227 . [Accessed 31 Mar 2014]	"Soil Well-drained or Moist but well-drained Acid, Alkaline or Neutral Clay, Sand or Loam"
	Missouri Botanical Garden. 2014. <i>Magnolia wilsonii</i> . http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=d341 . [Accessed 30 Mar 2014]	"Best grown in moist, slightly acidic, organically rich, well-drained loams in full sun to part shade." ... "Plants appreciate consistent and regular moisture throughout the year, and are generally intolerant of soil extremes (dry or wet)."
	Great Plant Picks. 2014. Great Plant Picks. Great Plant Picks	"It will thrive in a rich moist to well-drained soil, but will tolerate sand and clay if the drainage is adequate."

Qsn #	Question	Answer
	Shoot Gardening. 2014. <i>Magnolia wilsonii</i> (Wilson magnolia). http://www.shootgardening.co.uk/plant/magnolia-wilsonii . [Accessed 31 Mar 2014]	"Soil type: Chalky, Clay, Loamy, Sandy (will tolerate most soil types)"
411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Wu, Z.Y., Raven, P.H. & Hong, D.Y. (eds.). 2008. Flora of China. Vol. 7 (Menispermaceae through Capparaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	"Shrubs or small trees, rarely to 8 m tall."
412	Forms dense thickets	n
	Source(s)	Notes
	McNamara, W.A. 2010. <i>Magnolia wilsonii</i> . The Quarryhill Quarterly 7(1): 3-4	"When Wilson first saw this magnolia in 1904, he noted that it was quite common. Now listed as endangered in BGCI's Red List of the Magnoliaceae, this species, like so many others in the magnolia family, has a doubtful future." [Common in past, but no evidence of thicket formation]
501	Aquatic	n
	Source(s)	Notes
	Wu, Z.Y., Raven, P.H. & Hong, D.Y. (eds.). 2008. Flora of China. Vol. 7 (Menispermaceae through Capparaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	"Forests; 1900–3000 m. Guizhou, C and W Sichuan, N Yunnan." [Terrestrial]
502	Grass	n
	Source(s)	Notes
	Wu, Z.Y., Raven, P.H. & Hong, D.Y. (eds.). 2008. Flora of China. Vol. 7 (Menispermaceae through Capparaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	Magnoliaceae
503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	Wu, Z.Y., Raven, P.H. & Hong, D.Y. (eds.). 2008. Flora of China. Vol. 7 (Menispermaceae through Capparaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	Magnoliaceae
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	n

Qsn #	Question	Answer
	Source(s)	Notes
	Wu, Z.Y., Raven, P.H. & Hong, D.Y. (eds.). 2008. Flora of China. Vol. 7 (Menispermaceae through Capparaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	"Shrubs or small trees, rarely to 8 m tall."

601	Evidence of substantial reproductive failure in native habitat	
	Source(s)	Notes
	McNamara, W.A. 2010. <i>Magnolia wilsonii</i> . The Quarryhill Quarterly 7(1): 3-4	"Habitat loss and fragmentation have caused its numbers in the wild to decrease to a dangerously low level." ... "Another threat to its survival in the wild is demand for its bark due to its medicinal qualities. It is frequently used as a substitute for the bark of <i>Magnolia officinalis</i> ." [Possibly experiencing reproductive failure due to habitat loss & overharvesting]
	Cicuzza, D., Newton, A., & Oldfield, S. 2007. The Red List of Magnoliaceae. Fauna & Flora International, Cambridge, UK	"There are scattered populations within the range of western Sichuan, northern Yunnan and western Guizhou in montane forest and thicket between 2000 m and 3300 m. The potential forest remaining for this species is 49,618 km ² . The forest within the range has been extensively cleared and the bark of the tree is also exploited to a considerable degree. Although it contains the same medicinal extract as <i>M. officinalis</i> , it makes a relatively poor substitute."

602	Produces viable seed	y
	Source(s)	Notes
	McNamara, W.A. 2010. <i>Magnolia wilsonii</i> . The Quarryhill Quarterly 7(1): 3-4	"The first time that I collected seed of <i>Magnolia wilsonii</i> was in the fall of 1992 on Niba Shan in western Sichuan." ... "We hunted for hours through dense forests and finally came upon one good sized, ten-meter high tree. After a thorough search of the tree, we found only one fruit with six good seeds." ... "We did manage to make a seed collection of <i>Magnolia wilsonii</i> later during that expedition in 1994."

603	Hybridizes naturally	
	Source(s)	Notes
	Pan-global Plants. 2014. Trees & Shrubs: <i>Magnolia virginiana</i> 'Moonglow' to <i>Mahonia x lindsayae</i> 'Cantab'. http://www.panglobalplants.com/plants-for-sale/?table=shrubs&letter=M&the_page=4 . [Accessed 31 Mar 2014]	" <i>Magnolia x gotoburgensis</i> Chollipo clone - A newly available hybrid between <i>M. wilsonii</i> and <i>M. obovata</i> , raised in Sweden. This clone is of upright tree form and is derived from Chollipo arboretum, S. Korea. Highly scented, upward-facing, saucer-like white flowers with a central red cone of filaments are seen in June over handsome foliage, up to 30cm long." [Artificial hybrids possible. Unknown if natural hybridization occurs]

604	Self-compatible or apomictic	
	Source(s)	Notes

Qsn #	Question	Answer
	Thien, L. B. 1974. Floral biology of Magnolia. American Journal of Botany 61(10): 1037-1045.	"The floral biology of eight species of Magnolia native to the United States is described." ... "All the native species of Magnolia are protogynous, and self-pollination of an individual flower is so difficult to achieve that the first flowers of the season usually do not set fruit (self-incompatibility may also be a factor)" [American Magnolia species are either self-compatible, or self-incompatible. Unknown for Chinese species such as <i>M. wilsonii</i>]

605	Requires specialist pollinators	n
	Source(s)	Notes
	Thomas, P. A. 2000. Trees: Their Natural History. Cambridge University Press, Cambridge, UK	"Figure 5.2. Magnolia flower (<i>Magnolia wilsonii</i>), which appeals to a wide range of insects offering an open flower facing upwards, a drab colour and many stamens."

606	Reproduction by vegetative fragmentation	n
	Source(s)	Notes
	Dave's Garden. 2014. PlantFiles: Wilson's Magnolia - <i>Magnolia wilsonii</i> . http://davesgarden.com/guides/pf/go/142911/ . [Accessed 31 Mar 2014]	"Propagation Methods: From woody stem cuttings From softwood cuttings From semi-hardwood cuttings From seed; stratify if sowing indoors" [No evidence of vegetative spread]

607	Minimum generative time (years)	>3
	Source(s)	Notes
	Shoot Gardening. 2014. <i>Magnolia wilsonii</i> (Wilson magnolia). http://www.shootgardening.co.uk/plant/magnolia-wilsonii . [Accessed 31 Mar 2014]	"20-50 Years To maturity"
	Grows on You. 2014. Genus: Magnolia. http://www.growsonyou.com/genus/Magnolia . [Accessed 31 Mar 2014]	"Many Magnolias will take many years to flower from seed but remember that this is a diverse genus. " [Exact age of maturity for <i>M. wilsonii</i> unknown, but it will presumably take 4+ years]
	Dave's Garden. 2014. PlantFiles: Wilson's Magnolia - <i>Magnolia wilsonii</i> . http://davesgarden.com/guides/pf/go/142911/ . [Accessed 31 Mar 2014]	"Took 5 years to establish and bloom but worth the wait. Blooms are few but have an amazing fragrance."

701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	n
	Source(s)	Notes
	Wu, Z.Y., Raven, P.H. & Hong, D.Y. (eds.). 2008. Flora of China. Vol. 7 (Menispermaceae through Capparaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	"Fruit red and then becoming purple when mature, terete, 6–10 × 2–3 cm, pendulous; mature carpels beaked. Seeds obovoid, ca. 6 mm." [No evidence of inadvertent dispersal, and fruits and seeds lack means of external attachment]

702	Propagules dispersed intentionally by people	y
-----	--	---

Qsn #	Question	Answer
	Source(s)	Notes
	Russell, T. 2012. Smithsonian Nature Guide: Trees. DK Publishing, New York, NY	"This broadly spreading shrublike tree has become a popular garden plant in recent years."
703	Propagules likely to disperse as a produce contaminant	n
	Source(s)	Notes
	WRA Specialist. 2014. Personal Communication	Rare in the wild, and in cultivation, and no evidence of produce contamination.
704	Propagules adapted to wind dispersal	n
	Source(s)	Notes
	Wu, Z.Y., Raven, P.H. & Hong, D.Y. (eds.). 2008. Flora of China. Vol. 7 (Menispermaceae through Capparaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	"Fruit red and then becoming purple when mature, terete, 6–10 × 2–3 cm, pendulous; mature carpels beaked. Seeds obovoid, ca. 6 mm." [No adaptations for wind dispersal]
705	Propagules water dispersed	n
	Source(s)	Notes
	McNamara, W.A. 2010. <i>Magnolia wilsonii</i> . The Quarryhill Quarterly 7(1): 3-4	"It is found in mixed forests between 1900 and 3300 meters elevation." [No evidence of occurrence in riparian areas]
706	Propagules bird dispersed	y
	Source(s)	Notes
	Russell, T. 2012. Smithsonian Nature Guide: Trees. DK Publishing, New York, NY	"A green aggregate fruit, up to 3 in (7.5 cm) long, develops after flowering. It ripens to purple-pink and opens to reveal many bright orange-red, glossy seeds inside." [Adapted for frugivory]
	Herrera, C. M., Jordano, P., Guitián, J., & Traveset, A. 1998. Annual variability in seed production by woody plants and the masting concept: reassessment of principles and relationship to pollination and seed dispersal. <i>The American Naturalist</i> , 152(4): 576-594	"Three of the seed dispersal contrasts were among genera within families: <i>Fraxinus</i> (nonzoochorous) versus <i>Olea</i> and <i>Phillyrea</i> (endozoochorous) within the Oleaceae (contrast 1, fig. 3B), <i>Liriodendron</i> (nonzoochorous) versus <i>Magnolia</i> (endozoochorous) within the Magnoliaceae..." [Magnolia are endozoochorous = Dispersal by the agency of animals, typically and especially after passage of non-digestible fruits or seeds through the gut]
707	Propagules dispersed by other animals (externally)	n
	Source(s)	Notes
	Wu, Z.Y., Raven, P.H. & Hong, D.Y. (eds.). 2008. Flora of China. Vol. 7 (Menispermaceae through Capparaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	"Fruit red and then becoming purple when mature, terete, 6–10 × 2–3 cm, pendulous; mature carpels beaked. Seeds obovoid, ca. 6 mm." [No evidence of external dispersal, and fruits and seeds lack means of external attachment]
708	Propagules survive passage through the gut	y

Qsn #	Question	Answer
	Source(s)	Notes
	Herrera, C. M., Jordano, P., Guitián, J., & Traveset, A. 1998. Annual variability in seed production by woody plants and the masting concept: reassessment of principles and relationship to pollination and seed dispersal. <i>The American Naturalist</i> , 152(4): 576-594	[Presumably Yes] "Three of the seed dispersal contrasts were among genera within families: Fraxinus (nonzoochorous) versus Olea and Phillyrea (endozoochorous) within the Oleaceae (contrast 1, fig. 3B), Liriodendron (nonzoochorous) versus Magnolia (endozoochorous) within the Magnoliaceae..." [Magnolia are endozoochorous = Dispersal by the agency of animals, typically and especially after passage of non-digestible fruits or seeds through the gut]

801	Prolific seed production (>1000/m2)	
	Source(s)	Notes
	Wu, Z.Y., Raven, P.H. & Hong, D.Y. (eds.). 2008. <i>Flora of China</i> . Vol. 7 (Menispermaceae through Capparaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	"Fruit red and then becoming purple when mature, terete, 6–10 × 2–3 cm, pendulous; mature carpels beaked. Seeds obovoid, ca. 6 mm." [Unknown, but unlikely. Rarity in wild suggests possible seed limitation]

802	Evidence that a persistent propagule bank is formed (>1 yr)	
	Source(s)	Notes
	Han, C. Y., & Long, C. L. 2010. Seed dormancy, germination and storage behavior of <i>Magnolia wilsonii</i> (Magnoliaceae), an endangered plant in China. <i>Acta Botanica Yunnanica</i> , 32(1): 47-52	"In this paper, we measured the embryo morphology and size of <i>Magnolia wilsonii</i> seeds. And the effects of temperature, stratification, KNO ₃ and soaking on seed dormancy and germination were studied. Seeds were desiccated to different moisture content, and then stored at 4°C and -20°C for 100 d. The effects of desiccation and storage temperature on seed viability of <i>M. wilsonii</i> were analyzed. The results showed that the underdeveloped embryos of <i>M. wilsonii</i> seeds needed cold stratification to achieve physiological afterripening. The favorable temperature for germination of <i>M. wilsonii</i> seeds was 25/20°C. Cold stratification and GA ₃ could effectively overcome dormancy of <i>M. wilsonii</i> seeds. Therefore, <i>M. wilsonii</i> seeds have morphophysiological dormancy. About 53.50% of seeds could survive in the moisture content of 5.39%. After 100 d storage at -20°C, all seeds in different moisture contents died. However, after 100 d storage at 4°C, 76% of seeds survived. Thus, <i>M. wilsonii</i> seeds exhibited intermediate seed storage behavior. The optimum storage environments was dry or moist storage at 4°C." [Possibly]

803	Well controlled by herbicides	
	Source(s)	Notes
	WRA Specialist. 2014. Personal Communication	Unknown. No information on herbicide efficacy or chemical control of this species

Qsn #	Question	Answer
804	Tolerates, or benefits from, mutilation, cultivation, or fire	
	Source(s)	Notes
	Trees for Life. 2014. Magnolia - Magnolia wilsonii. https://www.frankpmatthews.com/magnolia-wilsonii.htm . [Accessed 31 Mar 2014]	"Tree characteristics" ... "Do Not Prune" [Unknown, but suggests intolerance to pruning or cutting]

805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	WRA Specialist. 2014. Personal Communication	Unknown

Summary of Risk Traits:

High Risk / Undesirable Traits

- Grows in tropical climates
- Elevation range exceeds 1000 m
- Shade-tolerant
- Tolerates many soil types
- Bird-dispersed seed

Low Risk Traits

- No reports of naturalization or invasiveness found
- Unarmed (no spines, thorns or burrs)
- Non-toxic
- Does not spread vegetatively
- Reaches reproductive maturity after 4 or more years