

Family: *Poaceae*

Taxon: *Phyllostachys aurea*

Synonym:

Common Name: fish-pole bamboo
golden bamboo

Questionnaire :	current 20090513	Assessor:	Patti Clifford	Designation: H(HPWRA)
Status:	Assessor Approved	Data Entry Person:	Patti Clifford	WRA Score 9
101	Is the species highly domesticated?		y=-3, n=0	n
102	Has the species become naturalized where grown?		y=1, n=-1	
103	Does the species have weedy races?		y=1, n=-1	
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)	Intermediate
202	Quality of climate match data		(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
203	Broad climate suitability (environmental versatility)		y=1, n=0	y
204	Native or naturalized in regions with tropical or subtropical climates		y=1, n=0	y
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	y
302	Garden/amenity/disturbance weed		n=0, y = 1*multiplier (see Appendix 2)	
303	Agricultural/forestry/horticultural weed		n=0, y = 2*multiplier (see Appendix 2)	n
304	Environmental weed		n=0, y = 2*multiplier (see Appendix 2)	y
305	Congeneric weed		n=0, y = 1*multiplier (see Appendix 2)	y
401	Produces spines, thorns or burrs		y=1, n=0	n
402	Allelopathic		y=1, n=0	
403	Parasitic		y=1, n=0	n
404	Unpalatable to grazing animals		y=1, n=-1	n
405	Toxic to animals		y=1, n=0	n
406	Host for recognized pests and pathogens		y=1, n=0	
407	Causes allergies or is otherwise toxic to humans		y=1, n=0	n
408	Creates a fire hazard in natural ecosystems		y=1, n=0	
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	
411	Climbing or smothering growth habit		y=1, n=0	n

412	Forms dense thickets	y=1, n=0	y
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	y
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	y=1, n=0	n
602	Produces viable seed	y=1, n=-1	y
603	Hybridizes naturally	y=1, n=-1	
604	Self-compatible or apomictic	y=1, n=-1	
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	y
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	1
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	y
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	
705	Propagules water dispersed	y=1, n=-1	
706	Propagules bird dispersed	y=1, n=-1	n
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	
801	Prolific seed production (>1000/m2)	y=1, n=-1	n
802	Evidence that a persistent propagule bank is formed (>1 yr)	y=1, n=-1	
803	Well controlled by herbicides	y=-1, n=1	y
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	y
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	y=-1, n=1	

Designation: H(HPWRA)

WRA Score **9**

Supporting Data:

101	2011. WRA Specialist. Personal Communication.	[Is the species highly domesticated? No] No evidence of domestication that reduces invasive potential.
102	2011. WRA Specialist. Personal Communication.	[Has the species become naturalized where grown?] NA
103	2011. WRA Specialist. Personal Communication.	[Does the species have weedy races?] NA
201	1995. Chened, C./Widjaja, E.A.. <i>Phyllostachys aurea</i> Carr. Ex A. & C. RiviFre [Internet record] from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=2094	[Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"? Low] <i>Phyllostachys aurea</i> is believed to originate from temperate and subtropical southern China and Japan.
201	2011. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database Index]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	[Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"?] Native range: China - Fujian, Zhejiang [temperate]
202	2011. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database Index]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	[Quality of climate match data?] Native range: China - Fujian, Zhejiang [temperate]
203	1995. Chened, C./Widjaja, E.A.. <i>Phyllostachys aurea</i> Carr. Ex A. & C. RiviFre [Internet record] from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=2094	[Broad climate suitability (environmental versatility)? Yes] "Small natural forests of <i>Phyllostachys aurea</i> occur in southeastern China from low altitudes up to 1000 m and up to 2000 m in southwestern China. <i>Phyllostachys aurea</i> is frost hardy, and will tolerate up to —10(—18)°C."
203	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Broad climate suitability (environmental versatility)? Yes] Although most common as an escaped cultivar in the southern United States, golden bamboo survives in climates as far north as Vancouver, British Columbia, in the West and Buffalo, New York, in the East. Golden bamboo plants tolerate temperatures as low as -4 °F (-18 °C). Golden bamboo escapes occur on Cumberland Island, Georgia, where the climate is subtropical. Summers are hot and humid and winters are short and mild. The average high and low monthly temperatures are 81 °F (27 °C) and 54 °F (12 °C). Annual precipitation averages 51 inches (1,295 mm), and rains are generally heavy from September to October." In China, golden bamboo stands occur at elevations of up to 3,300 feet (1,000 m) in the southeast and up to 6,600 feet (2,000 m) in the southwest.
204	1995. Chened, C./Widjaja, E.A.. <i>Phyllostachys aurea</i> Carr. Ex A. & C. RiviFre [Internet record] from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=2094	[Native or naturalized in regions with tropical or subtropical climates? Yes] In some countries it has also naturalized, e.g. in Indonesia (Merapi Mountain in Central Java).
204	2002. Staples, G.W./Imada, C.T./Herbst, D.R.. New Hawaiian plant records for 2000. Bishop Occasional Papers. 68: .http://hbs.bishopmuseum.org/pdf/op68-03.pdf	[Native or naturalized in regions with tropical or subtropical climates? Yes] "Long cultivated in the Hawaiian Islands as an ornamental, this is the first report of this dwarf bamboo as a naturalized element in the flora. The sizable population on windward O'ahu apparently spread vegetatively from a roadside ornamental planting; it now fills more than one acre of steep hillside and has formed a virtual monoculture, excluding other plant species."
205	1995. Chened, C./Widjaja, E.A.. <i>Phyllostachys aurea</i> Carr. Ex A. & C. RiviFre [Internet record] from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=2094	[Does the species have a history of repeated introductions outside its natural range? Yes] <i>Phyllostachys aurea</i> is believed to originate from temperate and subtropical southern China and Japan. It has been introduced into most countries of the world and is often grown as an ornamental, even in temperate climates.

205	2005. Evans, C.W./Bargeron, C.T./Moorhead, D.J./Douce, G.K.. Invasive weeds in Georgia - golden bamboo- <i>Phyllostachys aurea</i> . The Bugwood Network University of Georgia, http://www.gaepcc.org/weeds/bamboo.html	[Does the species have a history of repeated introductions outside its natural range? Yes] Golden bamboo is native to China and was first introduced into America in 1882 in Alabama. It is a popular ornamental and has also been used for fishing poles and privacy fences. It occurs in the southeastern United States and in Washington State. Golden bamboo is common in Georgia.
205	2011. Gielis, J.. Future possibilities for bamboo in European agriculture. www.bamboonetwork.org , http://www.bamboonetwork.org/downloads/gielis01.pdf	[Does the species have a history of repeated introductions outside its natural range? Yes] <i>Phyllostachys</i> is widely cultivated and in high demand in Europe.
301	1995. Chenged, C./Widjaja, E.A.. <i>Phyllostachys aurea</i> Carr. Ex A. & C. RiviFre [Internet record] from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=2094	[Naturalized beyond native range? Yes] In some countries it has also naturalized, e.g. in Indonesia (Merapi Mountain in Central Java).
301	2002. Staples, G.W./Imada, C.T./Herbst, D.R.. New Hawaiian plant records for 2000. Bishop Occasional Papers. 68: .http://hbs.bishopmuseum.org/pdf/op68-03.pdf	[Naturalized beyond native range? Yes] "Long cultivated in the Hawaiian Islands as an ornamental, this is the first report of this dwarf bamboo as a naturalized element in the flora. The sizable population on windward O'ahu apparently spread vegetatively from a roadside ornamental planting; it now fills more than one acre of steep hillside and has formed a virtual monoculture, excluding other plant species."
301	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Naturalized beyond native range? Yes] "Golden bamboo is not native to North America but is cultivated as far north as Vancouver, British Columbia, in the West and Buffalo, New York, in the East. Escaped populations, however, are generally restricted to the southern United States from Texas to Florida and from Arkansas to North Carolina."
302	2011. U.S. Forest Service. Weed of the week: golden bamboo - <i>Phyllostachys aurea</i> . USDA Forest Service, Newton Square, Pennsylvania http://www.invasive.org/weedcd/pdfs/wow/golden-bamboo.pdf	[Garden/amenity/disturbance weed?]It is common around old home-sites and has escaped. It colonized by rhizomes with infestations rapidly expanding after disturbance. Reported invasive in Georgia, West Virginia, Virginia, Maryland and Pennsylvania.
303	2011. WRA Specialist. Personal Communication.	[Agricultural/forestry/horticultural weed? No] No evidence.
304	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Environmental weed? Yes] "Although golden bamboo is generally found near planting sites, in some areas there has been extensive spread that has negatively impacted native plant communities. In Texas, golden bamboo has been widely cultivated, and in Grayson and Tarrant counties, extensive stands are spreading on sandy soils. In a study of riparian areas in Georgia, researchers sampled 15 watersheds in the west-central part of the state. Golden bamboo occurred in just 1 urban watershed. Plants were found in a "natural" area adjacent to a city park but away from mowed or high foot traffic areas. Although golden bamboo was not reported in a 1991 survey of Cumberland Island, Georgia, researchers estimated that it occupied an area of 31,440 feet ² (2,921 m ²) in surveys conducted in 2003 and 2004. Nonnative taxa were of secondary importance in the 1991 survey, which focused on rare native taxa. In 2003 and 2004, golden bamboo did not occur in "natural areas", but researchers noted seedlings or new clones at the periphery of established clumps. In a 1980 survey of southeastern National Park Service officials, golden bamboo was noted in South Carolina's Congaree Swamp National Monument and Cowpens National Battlefield. In Hawaii, golden bamboo was first reported in native plant communities in 1992, although it has been cultivated in the state for a "long time". Researchers found a clone covering 1 acre (0.4 ha) of a steep hillside in Kailua, Oahu, Hawaii. The clone originated from a roadside ornamental planting and forms a near monoculture on the hillside."
305	2011. Tropical Biology Association. <i>Phyllostachys nigra</i> . http://www.tropical-biology.org/research/dip/species/Phyllostachys%20nigra.htm	[Congeneric weed? Yes] <i>Phyllostachys nigra</i> is invasive in Tanzania, Australia and Hawaii. It forms dense and extensive stands excluding other vegetation.

401	2006. Wu, Z. Y., P. H. Raven & D. Y. Hong, eds.. Flora of China. Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis http://flora.huh.harvard.edu/china/mss/volume22/index.htm	[Produces spines, thorns or burrs No]"Culms 5–12 m, 2–5 cm in diam.; internodes 15–30 cm, usually strongly shortened and commonly ventricose at basal nodes, distally inflated for several mm below node at mid-culm and basal nodes, initially white powdery, glabrous; wall 4–8 mm thick; nodal ridge as prominent as sheath scar or slightly more prominent; sheath scar initially fringed with white pubescence. Culm sheaths yellow-green or pale red-brown, becoming straw-colored, with variably sized brown spots, base edged with white pubescence; auricles and oral setae absent; ligule yellow-green, truncate or weakly convex at apex, very short, 1–2 mm, margin longer pale green ciliate; blade reflexed, green, with yellow margins, linear, flat or crinkled in upper sheaths. Leaves 2 or 3 per ultimate branch; sheath glabrous; auricles and oral setae absent or deciduous; ligule short; blade 6–12 × 1–1.8 cm, abaxially pilose especially near petiole."
402	2011. WRA Specialist. Personal Communication.	[Allelopathic?] Unknown.
403	2006. Wu, Z. Y., P. H. Raven & D. Y. Hong, eds.. Flora of China. Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis http://flora.huh.harvard.edu/china/mss/volume22/index.htm	[Parasitic? No] Poaceae.
404	2011. Forest Floor. Bamboo pages. http://www.forestfloor.co.nz/ff/bamboopastoral.htm	[Unpalatable to grazing animals? No] Bamboos tend to be highly nutritious and stock love to get at them. However three points must be noted in relation to their edibility. Firstly several species of bamboo (mostly tropical ones) contain hydrocyanic acid in their new shoots, noticeable as a bitterness. This substance can cause poisoning if eaten in sufficient quantity, but is easily removed by boiling for human consumption. In some parts of the world (mainly the tropics), bamboo shoots are routinely protected from cattle for this reason, until the shoots have grown to full height, when they leaf up and the leaves are highly nutritious (more or less depending on the time of year). Many other types of plant that stock regularly eat contain small levels of toxins, it is only if they eat too much at once that there is any danger of adverse effects. Some species of bamboo are much less toxic than others, e.g. <i>Phyllostachys</i> species (especially <i>P. aurea</i> which is edible raw by humans). Shoots of several <i>Phyllostachys</i> species are eaten by dairy cows without any adverse effects.
405	2011. National Center for Biotechnology Information. PubMed. U.S. National Library of Medicine, Bethesda, Maryland http://www.ncbi.nlm.nih.gov/	[Toxic to animals? No] No evidence of toxicity.
405	2011. Specialized Information Services, U.S. National Library of Medicine. TOXNET toxicology data network [online database]. National Institutes of Health, http://toxnet.nlm.nih.gov/	[Toxic to animals? No] No evidence of toxicity.
406	2011. WRA Specialist. Personal Communication.	[Host for recognized pests and pathogens?] Unknown.
407	2011. National Center for Biotechnology Information. PubMed. U.S. National Library of Medicine, Bethesda, Maryland http://www.ncbi.nlm.nih.gov/	[Causes allergies or is otherwise toxic to humans? No] No evidence of allergies or toxins.
407	2011. Specialized Information Services, U.S. National Library of Medicine. TOXNET toxicology data network [online database]. National Institutes of Health, http://toxnet.nlm.nih.gov/	[Causes allergies or is otherwise toxic to humans? No] No evidence of allergies or toxins.
408	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Creates a fire hazard in natural ecosystems?]"Although fire behavior and severity in golden bamboo stands have not been studied or reported in detail, pictures below suggest that stand and fuel structure can vary by time since cutting and/or site conditions. Although the golden bamboo stand in the picture on the left lacks basal leaves, fire is likely to carry through these stands if there are dead stem and leaves present on the ground. Flames typically reach the leafy canopy, producing "spectacular" fires. Stems make popping sounds as the moisture in the nodes is heated and expands to split open the nodes."
409	2005. Evans, C.W./Bargeron, C.T./Moorhead, D.J./Douce, G.K.. Invasive weeds in Georgia - golden bamboo- <i>Phyllostachys aurea</i> . The Bugwood Network University of Georgia, http://www.gaeppc.org/weeds/bamboo.html	[Is a shade tolerant plant at some stage of its life cycle? Yes] It thrives in full sun and can tolerate moderate shade.

409	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Is a shade tolerant plant at some stage of its life cycle? Yes] Golden bamboo growth is considered best in full sun conditions, but plants may persist in shade. In the hottest climates, shade may improve golden bamboo growth.
410	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)? Yes] "Golden bamboo growth is considered best in rich, deep, well-drained sands, although the Southeastern Exotic Pest Plant Council reports "vigorous" golden bamboo growth and spread in moist, deep loams. In southwestern Louisiana, golden bamboo occurs in prairies with poorly drained silt loam to clay soils. Although golden bamboo may persist on a variety of soils, stem diameter and height are likely reduced in fine textured and/or poorly drained soils."
411	2006. Wu, Z. Y., P. H. Raven & D. Y. Hong, eds.. Flora of China. Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis http://flora.huh.harvard.edu/china/mss/volume22/index.htm	[Climbing or smothering growth habit? No] Bamboo.
412	2002. Swearingen, J./Reshetiloff, K./Slattery, B./Zwicker, S.. Plant Invaders of Mid-Atlantic Natural Areas. National Park Service and U.S. Fish and Wildlife Service, Washington D.C. http://www.nps.gov/plants/alien/pubs/midatlantic/efu.htm	[Forms dense thickets? Yes] Bamboos can form very dense single-species thickets that displace native plant species and create
412	2005. Evans, C.W./Bargeron, C.T./Moorhead, D.J./Douce, G.K.. Invasive weeds in Georgia - golden bamboo- <i>Phyllostachys aurea</i> . The Bugwood Network University of Georgia, http://www.gaepcc.org/weeds/bamboo.html	[Forms dense thickets? Yes] Golden bamboo can form dense, monocultural thickets that displace native species. Once bamboo is established, it is difficult to remove.
412	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Forms dense thickets? Yes] "Rhizome growth by golden bamboo clones can result in the development of dense thickets and colonies.. A single golden bamboo clump can produce up to 9.3 miles (15 km) of stems in its lifetime. Golden bamboo "once established, is very aggressive in both its rate of growth as well as the sprouting of new stems". Spread is often "rapid" in all directions from the point of establishment."
501	2006. Wu, Z. Y., P. H. Raven & D. Y. Hong, eds.. Flora of China. Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis http://flora.huh.harvard.edu/china/mss/volume22/index.htm	[Aquatic? No] Bamboo; terrestrial.
502	2006. Wu, Z. Y., P. H. Raven & D. Y. Hong, eds.. Flora of China. Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis http://flora.huh.harvard.edu/china/mss/volume22/index.htm	[Grass? Yes] Poaceae.
503	2006. Wu, Z. Y., P. H. Raven & D. Y. Hong, eds.. Flora of China. Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis http://flora.huh.harvard.edu/china/mss/volume22/index.htm	[Nitrogen fixing woody plant? No] Poaceae.
504	2006. Wu, Z. Y., P. H. Raven & D. Y. Hong, eds.. Flora of China. Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis http://flora.huh.harvard.edu/china/mss/volume22/index.htm	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? No] Poaceae.

601	1995. Chenged, C./Widjaja, E.A.. <i>Phyllostachys aurea</i> Carr. Ex A. & C. RiviFre [Internet record] from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=2094	[Evidence of substantial reproductive failure in native habitat? No] "Small natural forests of <i>Phyllostachys aurea</i> occur in southeastern China from low altitudes up to 1000 m and up to 2000 m in southwestern China. <i>Phyllostachys aurea</i> is frost hardy, and will tolerate up to —10(—18)°C. It grows best on rich, deep and well-drained sandy soils. In Indonesia it mostly grows in the highlands above 700 m altitude but plants grown in the lowland have shorter and smaller culms. In the Philippines it grows very well in Baguio at 1500 m altitude with average temperatures of 18—26°C." [no evidence]
602	2005. Evans, C.W./Bargeron, C.T./Moorhead, D.J./Douce, G.K.. Invasive weeds in Georgia - golden bamboo- <i>Phyllostachys aurea</i> . The Bugwood Network University of Georgia, http://www.gaeppc.org/weeds/bamboo.html	[Produces viable seeds? Yes] Mainly spreads via rhizomes, rarely by seeds. Golden bamboo rarely flowers or produces seeds, usually once every 7 to 12 years, but readily reproduces by rhizomes.
602	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Produces viable seeds? Yes] In 2003 and 2004, golden bamboo did not occur in "natural areas", but researchers noted seedlings or new clones at the periphery of established clumps.
603	2011. WRA Specialist. Personal Communication.	[Hybridizes naturally?] Unknown.
604	2011. WRA Specialist. Personal Communication.	[Self-compatible or apomictic?] Unknown.
605	2006. Wu, Z. Y., P. H. Raven & D. Y. Hong, eds.. Flora of China. Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis http://flora.huh.harvard.edu/china/mss/volume22/index.htm	[Requires specialist pollinators? No] Poaceae [wind pollinated]
605	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Requires specialist pollinators? No] Bamboo (Tribe Bambuseae) flowers are wind pollinated.
606	2005. Evans, C.W./Bargeron, C.T./Moorhead, D.J./Douce, G.K.. Invasive weeds in Georgia - golden bamboo- <i>Phyllostachys aurea</i> . The Bugwood Network University of Georgia, http://www.gaeppc.org/weeds/bamboo.html	[Reproduction by vegetative fragmentation? Yes] Spreads mainly through rhizomes, rarely by seed.
606	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Reproduction by vegetative fragmentation? Yes] Golden bamboo produces long, slender, and often hollow rhizomes. Rhizomes are branching, produce true roots, and generally exist entirely below ground. Each internode of the rhizome is capable of producing another rhizome or a new stem. Rhizomes grow horizontally and can support rapid spread.
607	1995. Chenged, C./Widjaja, E.A.. <i>Phyllostachys aurea</i> Carr. Ex A. & C. RiviFre [Internet record] from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=2094	[Minimum generative time (years)? 1] Young shoots appear in spring (April in China); they grow rapidly, reaching full height within 1 month, after which the branches and leaves develop before the summer starts. A culm matures in 3—5 years.
607	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Minimum generative time (years)? 1] "Vegetative growth from established clones can be rapid. Stems may reach full height within 1 month of emergence."
701	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)? Yes] "Researchers suspect that golden bamboo may be dispersed by rhizome fragments discarded in yard waste."

702	1995. Chened, C./Widjaja, E.A.. <i>Phyllostachys aurea</i> Carr. Ex A. & C. RiviFre [Internet record] from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=2094	[Propagules dispersed intentionally by people? Yes] Because of the abnormal internodes (irregularly shortened and swollen) in the lower part of the culms, <i>Phyllostachys aurea</i> is a popular garden ornamental (also as hedge). Its basal culm parts are used and sold as walking sticks, umbrella and fan handles and as various other souvenirs. The straight upper culm parts are used as fishing rods, ski poles, javelins and for furniture and construction. The young shoots are occasionally used as a vegetable.
702	2005. Evans, C.W./Barger, C.T./Moorhead, D.J./Douce, G.K.. Invasive weeds in Georgia - golden bamboo- <i>Phyllostachys aurea</i> . The Bugwood Network University of Georgia, http://www.gaeppc.org/weeds/bamboo.html	[Propagules dispersed intentionally by people? Yes] Golden bamboo is native to China and was first introduced into America in 1882 in Alabama. It is a popular ornamental and has also been used for fishing poles and privacy fences. It occurs in the southeastern United States and in Washington State. Golden bamboo is common in Georgia.
702	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Propagules dispersed intentionally by people? Yes] As of 2008, golden bamboo was still available for sale from garden centers and nurseries.
702	2011. Gielis, J.. Future possibilities for bamboo in European agriculture. www.bamboonetwork.org , http://www.bamboonetwork.org/downloads/gielis01.pdf	[Propagules dispersed intentionally by people? Yes] <i>Phyllostachys</i> is widely cultivated and in high demand in Europe.
703	2011. WRA Specialist. Personal Communication.	[Propagules likely to disperse as a produce contaminant? No] No evidence.
704	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Propagules adapted to wind dispersal?] Little is known about seed dispersal.
705	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Propagules water dispersed?] "Because seed production is rare, information on seed dispersal, seed banking, and germination was lacking as of the writing of this review (2009).
705	2011. WRA Specialist. Personal Communication.	[Propagules water dispersed?] Unknown
706	1995. Chened, C./Widjaja, E.A.. <i>Phyllostachys aurea</i> Carr. Ex A. & C. RiviFre [Internet record] from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=2094	[Propagules bird dispersed? No] Caryopsis linear-lanceolate in outline, 6—8 mm x 1.5—2.0 mm, grooved on back, style persistent.
707	2006. Wu, Z. Y., P. H. Raven & D. Y. Hong, eds.. <i>Flora of China</i> . Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis http://flora.huh.harvard.edu/china/mss/volume22/index.htm	[Propagules dispersed by other animals (externally)? No] Fruit a caryopsis [no means of external attachment].
708	2011. WRA Specialist. Personal Communication.	[Propagules survive passage through the gut?] Unknown.
801	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Prolific seed production (>1000/m ²)? No] Reports vary on the likelihood of flowering and the fate of golden bamboo clones after flowering. Most reports indicate that golden bamboo produces masses of flowers sporadically and synchronously, but reported intervals between mass flowering events range from 7 to 30 year."

802	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Evidence that a persistent propagule bank is formed (>1 yr)?] In 2003 and 2004, golden bamboo did not occur in "natural areas", but researchers noted seedlings or new clones at the periphery of established clumps. "Because seed production is rare, information on seed dispersal, seed banking, and germination was lacking as of the writing of this review (2009). Seeds produced by golden bamboo germinate once mature and moist. While dry seeds may sit dormant for several months, it is thought that viability is lost over time and that golden bamboo seeds lack any long-term dormancy.
802	2011. WRA Specialist. Personal Communication.	[Evidence that a persistent propagule bank is formed (>1 yr)?] Unknown.
803	2007. Czarnota, M.A./Derr, J.. Controlling bamboo (<i>Phyllostachys</i> Spp.) with herbicides. <i>Weed Technology</i> . 21: 80-83.	[Well controlled by herbicides? Yes] Greenhouse Trials. Glufosinate caused the greatest injury to golden bamboo, but the level of control was only 68% at 4 WAT (Table 1). Glyphosate injured bamboo 42% and other treatments caused 28% or less injury at 4 WAT. Glufosinate, glyphosate, and fluzifop reduced golden bamboo shoot-weight by 82, 70, and 63%, respectively, compared with the nontreated plants. Fenoxaprop, quinclorac, and dithiopyr had no effect on golden bamboo shoot-weight, whereas sethoxydim and clethodim caused less than 35% decrease in shoot weight. Glyphosate and glufosinate reduced bamboo regrowth shoot-weight by more than 95%, whereas fluzifop reduced shoot regrowth by 85%.
803	2011. U.S. Forest Service. Weed of the week: golden bamboo - <i>Phyllostachys aurea</i> . USDA Forest Service, Newton Square, Pennsylvania http://www.invasive.org/weedcd/pdfs/wow/golden-bamboo.pdf	[Well controlled by herbicides? Yes] It can be effectively controlled using any of several readily available general use herbicides such as glyphosate. Foliar Spray Method: This method should be considered for large areas of bamboo where risk to non-target species is minimal. Air temperature should be above 65°F to ensure absorption of herbicides.
804	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Tolerates, or benefits from, mutilation, cultivation, or fire? Yes] Golden bamboo sprouts after cutting, and dispersal is primarily through vegetative means.
805	2009. Gucker. <i>Phyllostachys aurea</i> . In: Fire Effects System [online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, http://www.fs.fed.us/database/feis/plants/graminoid/phyaur/all.html	[Effective natural enemies present locally (e.g. introduced biocontrol agents)?] Biological control: As of 2009, no insects or pathogens have been released to control golden bamboo, and reports of biological control investigations were lacking.
805	2011. WRA Specialist. Personal Communication.	[Effective natural enemies present locally (e.g. introduced biocontrol agents)?] Unknown.