

Family: *Poaceae*

Taxon: *Cephalostachyum pergracile*

Synonym: *Oxytenanthera aliena* McClure

Common Name: tinwa bamboo

Schizostachyum pergracile (Munro) Majumda

Questionnaire :	current 20090513	Assessor:	HPWRA OrgData	Designation: L
Status:	Assessor Approved	Data Entry Person:	HPWRA OrgData	WRA Score 0
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)	High
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	n
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	
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)	n
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		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	n
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	
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	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	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	y
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	n
801	Prolific seed production (>1000/m2)	y=1, n=-1	
802	Evidence that a persistent propagule bank is formed (>1 yr)	y=1, n=-1	
803	Well controlled by herbicides	y=-1, n=1	
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: L

WRA Score 0

Supporting Data:

101	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	[Is the species highly domesticated? No] No evidence
102	2013. WRA Specialist. Personal Communication.	NA
103	2013. WRA Specialist. Personal Communication.	NA
201	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	[Species suited to tropical or subtropical climate(s) 2-High] "C. pergracile is a closely tufted, sympodial bamboo with erect culms to 7-20 m tall and 2.5-5 cm in diameter. It is one of the commonest and most widespread bamboos in the mixed deciduous forest of Myanmar and Thailand. It is also found in Yunnan, Laos, Nepal and eastern India. "
202	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	[Quality of climate match data 2-High]
203	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	[Broad climate suitability (environmental versatility)? No] "- Altitude range: 50 - 400 m - Mean annual rainfall: 800 - 1000 mm - Rainfall regime: summer - Dry season duration: 0 - 6 months - Mean annual temperature: 22 - 33°C - Mean maximum temperature of hottest month: 25 - 37°C - Mean minimum temperature of coldest month: 17 - 31°C"
204	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	[Native or naturalized in regions with tropical or subtropical climates? Yes] "It is one of the commonest and most widespread bamboos in the mixed deciduous forest of Myanmar and Thailand. It is also found in Yunnan, Laos, Nepal and eastern India. It is occasionally cultivated within its native distribution, and has also been successfully grown outside this area (e.g. Hong Kong, Guangzhou, Sumatra and Puerto Rico)."
205	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	[Does the species have a history of repeated introductions outside its natural range? Yes] "It is one of the commonest and most widespread bamboos in the mixed deciduous forest of Myanmar and Thailand. It is also found in Yunnan, Laos, Nepal and eastern India. It is occasionally cultivated within its native distribution, and has also been successfully grown outside this area (e.g. Hong Kong, Guangzhou, Sumatra and Puerto Rico)."
301	2007. Negi, P.S./Hajra, P.K.. Alien flora of Doon Valley, Northwest Himalaya. Current Science. 92(7): 968-978.	[Naturalized beyond native range? Unknown] Present, but naturalization status not specified
302	2012. Pauwels, L.. Cultivated and/or Exotic Plants in Central Africa. http://users.telenet.be/cr28796/CultAfrC.htm [Accessed 25 Mar 2013]	[Garden/amenity/disturbance weed? Unknown] "des plantes exotiques - E - subspontanées, envahissantes ou non, d'introduction récente" [Translation from French: "exotic plants - E - subspontaneous, invasive or not, recently introduced". Does not confirm that this bamboo is a weed]
302	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Garden/amenity/disturbance weed? Unknown] Referred to as a weed, but a subsequent review of the cited source did not confirm this status
303	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Agricultural/forestry/horticultural weed? No] No evidence
304	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Environmental weed? No] No evidence
305	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Congeneric weed? No] No evidence
401	2006. Wu, Z.Y./Raven, P.H./Hong, D.Y. (eds.). Flora of China. Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	[Produces spines, thorns or burrs? No] "Culms erect, 9–12 m, 5–7.5 cm in diam., apically drooping; internodes 30–45 cm, initially densely appressed setose; wall thin. Culm sheaths tardily deciduous, brown, shorter than culms, 10–15 x 15–20 cm, thickly leathery, smooth, densely glossy black-brown setose; auricles rounded, undulate, hirsute near margins; ligule inconspicuous; blade reflexed, ovateacuminate, ca. 5 cm, articulate with sheath, adaxially densely hairy. Leaf sheath margins ciliate; ligule ciliate; blade narrowly lanceolate, 15–35 x 2.5–3.8(–6) cm, base rounded."

402	2011. Larpkern, P./Moe, S.R./Totland, Ø.. Bamboo dominance reduces tree regeneration in a disturbed tropical forest. <i>Oecologia</i> . 165: 161–168.	[Allelopathic? Unknown] "Chou and Yang (1982) suggested that bamboos interfere with the regeneration of herb species in Taiwan through production of allelopathic substances from their leaves. It is possible that this may also have reduced tree seed germination and seedling establishment in our study area."
403	2006. Wu, Z.Y./Raven, P.H./Hong, D.Y. (eds.). <i>Flora of China</i> . Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	[Parasitic? No] Poaceae
404	1980. Sharma, Y.M.L.. Bamboos in the Asia-Pacific Region. Pp 99-120 in G. Lessard and A. Chouinard (eds.). <i>Bamboo Research in Asia</i> . International Development Research Centre, Ottawa, Canada	[Unpalatable to grazing animals? No] "In India and Bangladesh animals graze on the seedlings, and rodents cause damage to seeds and seedlings in India, Bangladesh, and Burma." ... "Table 1. Consumption (%) of bamboos in the Asia-Pacific Region by end-use and a breakdown of the uses by species" [C, pergracile used for fodder, so presumably palatable to grazing animals]
404	2008. Campos-Arceiz, A./Htun, T.Z.L.W./Takatsuki, S./Leimgruber, P.. Working with mahouts to explore the diet of work elephants in Myanmar (Burma). <i>Ecological Research</i> . 23: 1057–1064.	[Unpalatable to grazing animals? No] "Table 1 List of plants and plant parts eaten by captive elephants in Bago Yoma" [Cephalostachyum pergracile leaves and culms consumed]
405	1980. Sharma, Y.M.L.. Bamboos in the Asia-Pacific Region. Pp 99-120 in G. Lessard and A. Chouinard (eds.). <i>Bamboo Research in Asia</i> . International Development Research Centre, Ottawa, Canada	[Toxic to animals? No] "Table 1. Consumption (%) of bamboos in the Asia-Pacific Region by end-use and a breakdown of the uses by species" [C, pergracile used for fodder, so presumably palatable to grazing animals]
405	2008. Wagstaff, D.J.. <i>International poisonous plants checklist: an evidence-based reference</i> . CRC Press, Boca Raton, FL	[Toxic to animals? No] No evidence
406	2013. Toto Agriculture. <i>Cephalostachyum pergracile</i> . http://ethiopia.totoagriculture.org/FactsheetBrowse.aspx?factsheet=Plants&searchSpecies=Cephalostachyum%20pergracile&homeCountry=Ethiopia [Accessed 25 Mar 2013]	[Host for recognized pests and pathogens? No] "There are no reports of serious diseases. In India, the bamboo hispine beetle (<i>Estigma chinensis</i>) is the most important pest of standing bamboo; the lesser leaf roller (<i>Pyrausta bambucivora</i>) and the defoliator <i>Pyrausta coclesalis</i> sometimes cause damage. In Thailand, <i>Cephalostachyum pergracile</i> is remarkably resistant to stem borers."
407	2005. CAB International. <i>Forestry Compendium</i> . CAB International, Wallingford, UK	[Causes allergies or is otherwise toxic to humans? No] "The species is widely used in Thailand and Myanmar. The culms of <i>C. pergracile</i> are widely used in building (house posts, walling mats, shingles), and as fishing rods. They are easily split into thin strips which are used for basketry. The outer green layer can be split and used in the handicraft industry. The culms are also highly valued for cooking rice, and can be used as a raw material for paper pulp. <i>C. pergracile</i> is recommended for ornamental uses."
408	1980. Sharma, Y.M.L.. Bamboos in the Asia-Pacific Region. Pp 99-120 in G. Lessard and A. Chouinard (eds.). <i>Bamboo Research in Asia</i> . International Development Research Centre, Ottawa, Canada	[Creates a fire hazard in natural ecosystems?] "Fires are a menace, and the dry, dead bamboo clumps, which have produced seeds, are a serious fire hazard." [Possibly if cultivated in and flowering in drier areas]
408	2005. Marod, D./Neumrat, V./Panuthai, S./Hiroshi, T./Sahunalu, P.. The Forest Regeneration after Gregarious Flowering of Bamboo (<i>Cephalostachyum pergracile</i>) at Mae Klong Watershed Research Station, Kanchanaburi. <i>Kasetsart Journal (Nat. Sci.)</i> . 39: 588-593.	[Creates a fire hazard in natural ecosystems?] "Forest fire occurred after bamboo died and burnt all above ground parts of them in which they provided large vacant spaces to forest regeneration." [Possibly a fire hazard after flowering]
409	2007. Takahashi, M./Furusawa, H./Limtong, P./Sunanthapongsuk, V./Marod, D./Panuthai, S.. Soil nutrient status after bamboo flowering and death in a seasonal tropical forest in western Thailand. <i>Ecological Research</i> . 22: 160–164.	[Is a shade tolerant plant at some stage of its life cycle?] "Four bamboo species, <i>Gigantochloa albociliata</i> , <i>G. hasskarliana</i> , <i>B. tulda</i> , and <i>C. pergracile</i> , are predominant in the under story vegetation (Marod et al. 1999)." [Understory bamboo. Likely shade tolerant]
409	2009. American Bamboo Society. <i>Bamboo Species Source List No. 29</i> . bamboo.org/publications/request.php?9 [Accessed 26 Mar 2013]	[Is a shade tolerant plant at some stage of its life cycle?] "Shade / Sun 5=full sun" [Recommended for full sun in cultivation]
410	1998. Rao, A.N./Rao, V.R. (eds.). <i>Priority Species of Bamboo and Rattan</i> . IPGRI-APO, Serdang, Malaysia	[Tolerates a wide range of soil conditions? Yes] " <i>C. gracile</i> occurs in semi-humid to semi-arid regions on a range of soils, it is most common in well-drained loamy soils in Myanmar."
411	2006. Wu, Z.Y./Raven, P.H./Hong, D.Y. (eds.). <i>Flora of China</i> . Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	[Climbing or smothering growth habit? No] "Culms erect, 9–12 m, 5–7.5 cm in diam., apically drooping; internodes 30–45 cm, initially densely appressed setose; wall thin."

412	1976. Janzen, D.H.. Why Bamboos Wait so Long to Flower. Annual Review of Ecology and Systematics. 7: 347-391.	[Forms dense thickets? Yes, in native range] "There is no doubt that some mast crops are large enough to attract large numbers of animals. In India, there are records of 1200 square miles and of 96,000-104,600 acres of <i>Dendrocalamus strictus</i> , 6000 square miles of <i>Melocanna bambusoides</i> , 60 square miles of <i>Thyrstostachys oliveri</i> , more than 295 square miles of <i>Cephalostachyum pergracile</i> , 11 square miles of <i>Dendrocalamus hamiltonii</i> , and hundreds to thousands of square miles of <i>Bambusa polymorpha</i> in synchronized flower or seed (11, 82, 209, 235, 239, 263)."
412	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	[Forms dense thickets?] " <i>C. pergracile</i> is a closely tufted, sympodial bamboo with erect culms to 7-20 m tall and 2.5-5 cm in diameter." ... "It is characteristic of low, hilly country, thriving best on well drained loam and it grows in large stands." [Possibly yes, although may be a product of cultivation]
412	2011. Larpkern, P./Moe, S.R./Totland, Ø.. Bamboo dominance reduces tree regeneration in a disturbed tropical forest. <i>Oecologia</i> . 165: 161-168.	[Forms dense thickets? Forms dense clumps] "The intermediate layer is dominated by densely distributed clumps of three bamboo species; <i>Gigantochloa albociliata</i> , <i>Bambusa tulda</i> and <i>Cephalostachyum pergracile</i> , all characterized as sympodial, or the clump forming type. Life spans reported for these bamboo species are about 20 years for <i>C. pergracile</i> ..." ... "In general, <i>B. tulda</i> has a bigger clump size than <i>C. pergracile</i> , although clump size depends on the age of bamboos. The bamboo clumps in our study area varied in size between 0.5 and 3 m in diameter."
501	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	[Aquatic? No] Terrestrial
502	2006. Wu, Z.Y./Raven, P.H./Hong, D.Y. (eds.). Flora of China. Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	[Grass? Yes] Poaceae
503	2006. Wu, Z.Y./Raven, P.H./Hong, D.Y. (eds.). Flora of China. Vol. 22 (Poaceae). Science Press & Missouri Botanical Garden Press, Beijing & St. Louis	[Nitrogen fixing woody plant? No] Poaceae
504	2010. Gordon, D.R./Mitterdorfer, B./Pheloung, P.C. et al.. Guidance for addressing the Australian Weed Risk Assessment questions. <i>Plant Protection Quarterly</i> . 25(2): 56-74.	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? No] "This question relates to perennial plants with tubers, corms or bulbs. This question is specifically to deal with plants that have specialized organs and should not include plants merely with rhizomes/ stolons"
601	1995. Duriyaprapan, S./Jansen, P.C.M.. <i>Cephalostachyum pergracile</i> Munro [Internet] Record from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia http://www.proseanet.org . [Accessed 25 Mar 2013]	[Evidence of substantial reproductive failure in native habitat? No] " <i>Cephalostachyum pergracile</i> is one of the commonest and most widespread bamboos in mixed deciduous forests of Burma (Myanmar) and Thailand. In the moister forests it co occurs with <i>Bambusa polymorpha</i> Munro but in the driest forests where <i>Dendrocalamus strictus</i> (Roxb.) Nees is the prevailing bamboo, it is stunted. "
601	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	[Evidence of substantial reproductive failure in native habitat? No] "It is characteristic of low, hilly country, thriving best on well-drained loam and it grows in large stands. <i>C. pergracile</i> usually flowers sporadically. Occasionally it flowers gregariously over extensive areas."
602	2005. Marod, D./Neumrat, V./Panuthai, S./Hiroshi, T./Sahunalu, P.. The Forest Regeneration after Gregarious Flowering of Bamboo (<i>Cephalostachyum pergracile</i>) at Mae Klong Watershed Research Station, Kanchanaburi. <i>Kasetsart Journal (Nat. Sci.)</i> . 39: 588-593.	[Produces viable seed? Yes] "The results showed that the forest structure was dominated by undergrowth bamboo in the middle layer. <i>Cephalostachyum pergracile</i> had gregarious flowered in November 2001 which had the clump and culm density as 0.06 m ⁻² and 11.10 clump ⁻¹ , while, the average seed production was 2,442 ± 1,243 seed/m ² ."
603	2008. Yang, Q./Duan, Z.B./Wang, Z.L./He, K.H./Sun, Q.X./Peng, Z.H.. Bamboo resources, utilization and ex-situ conservation in Xishuangbanna, South-eastern China. <i>Journal of Forestry Research</i> . 19(1): 79-83.	[Hybridizes naturally? Unknown] "Bamboo is difficult to hybridize since its flowers are monocarp and most species flower gregariously at long periodic intervals (60-120a)."

604	2006 (onwards). Clayton, W.D./Vorontsova, M.S./Harman, K.T./Williamson, H.. GrassBase - The Online World Grass Flora. http://www.kew.org/data/grasses-db.html	[Self-compatible or apomictic? Unknown] "FERTILE SPIKELETS Spikelets comprising 1 fertile florets; with a barren rhachilla extension, or with diminished florets at the apex. Spikelets lanceolate; laterally compressed; 12–18 mm long; breaking up at maturity; disarticulating below each fertile floret. GLUMES Glumes several; 1–2 empty glumes; persistent; shorter than spikelet. Upper glume ovate; chartaceous; without keels. Upper glume apex acuminate; mucronate. FLORETS Fertile lemma lanceolate; 12–18 mm long; chartaceous; without keel. Lemma surface pubescent. Lemma apex acuminate; mucronate, or awned; 1 -awned. Principal lemma awn 1–3 mm long overall. Palea 1 length of lemma; chartaceous. Palea keels approximate. Palea apex dentate; 2 -fid; with excurrent keel veins. Apical sterile florets 1 in number; rudimentary. FLOWER Lodicules 3; veined; ciliate. Anthers 6; purple; anther tip smooth. Filaments free. Stigmas 2–3. Ovary with a steeple-like appendage; glabrous. "
605	1994. Zomlefer, W.B. Guide to Flowering Plant Families. The University of North Carolina Press, Chapel Hill & London	[Requires specialist pollinators? No] Poaceae [anemophilous. Wind-pollinated]
606	2012. Poppens, R.. Tropical Bamboos Propagation Manual. International Network for Bamboo and Rattan (INBAR), Beijing	[Reproduction by vegetative fragmentation?] "Hereafter 19 species and their propagation methods -those described in this manual - are listed." [Cephalostachyum pergracile cultivated by offsets, culm cuttings & seeds. All but seeds require human intervention for propagation]
607	1907. Ellis, E.V.. Cephalostachyum pergracile in flower (Tinwa). Indian Forester. 33: 323-324.	[Minimum generative time (years)? 10+] "One kind must have been three to six years old while the other must have been ten years old or so. The culms of this latter kind (about 1/3 rd inches thick) had somehow died, and only their bases (3 to 4 inches long) remained on the rhizomes. From the dormant buds on these bases, numerous 5-foot shoots had come up, and flowered, and thus looked much the same as the younger growth, though really the plants were older. Neither kind could by any stretch of imagination be said to be springing from rhizomes in any way mature. Other young growth, still older (about 12 years) was seen at its normal height (about 15 feet). Most of this also was ill flower."
701	2013. WRA Specialist. Personal Communication.	[Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)? No] Unlikely, as seeds are infrequently produced and lack means of external attachment
702	2005. ASEAN Tropical Plant Database. Cephalostachyum pergracile Munro. http://211.114.21.20/tropicalplant/html/search01_vieew.jsp?no=606&fno=&all=1 [Accessed 26 Mar 2013]	[Propagules dispersed intentionally by people? Yes] "For building, (house posts, walling mats, shingles) and as fishing rods. They are easily split into thin strips which are used for basketry and handicrafts. The culms are also used as a raw material for paper pulp, for cooking glutinous rice in the internode of a 1 year-old culm rice in Burma (Myanmar) and Thailand. Young shoots are edible but have a bitter taste. It is also an ornamental because of its glaucous green culms clothed with reddish-brown sheaths."
702	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	[Propagules dispersed intentionally by people? Yes] "windbreaks; hedges; ornamental"
703	2013. WRA Specialist. Personal Communication.	[Propagules likely to disperse as a produce contaminant? No] Unlikely, as seeds are infrequently produced
704	2006 (onwards). Clayton, W.D./Vorontsova, M.S./Harman, K.T./Williamson, H.. GrassBase - The Online World Grass Flora. http://www.kew.org/data/grasses-db.html	[Propagules adapted to wind dispersal? Yes] "Caryopsis with free brittle pericarp; oblong, or obovoid; 12.5 mm long" [Presumably wind dispersed, albeit possibly only for short distances]
705	2013. WRA Specialist. Personal Communication.	[Propagules water dispersed? Unknown] Perhaps possible if occurring along riverbanks or riparian corridors
706	1907. Ellis, E.V.. Cephalostachyum pergracile in flower (Tinwa). Indian Forester. 33: 323-324.	[Propagules bird dispersed? No] "Some seed has been collected, but ... it is hard to find, as pheasants, jungle fowl, parrots and doves, to say nothing of four-footed animals, have eaten it all up." [Birds act as seed predators]
706	2006 (onwards). Clayton, W.D./Vorontsova, M.S./Harman, K.T./Williamson, H.. GrassBase - The Online World Grass Flora. http://www.kew.org/data/grasses-db.html	[Propagules bird dispersed? No] "Caryopsis with free brittle pericarp; oblong, or obovoid; 12.5 mm long" [Not fleshy-fruited]
707	2006 (onwards). Clayton, W.D./Vorontsova, M.S./Harman, K.T./Williamson, H.. GrassBase - The Online World Grass Flora. http://www.kew.org/data/grasses-db.html	[Propagules dispersed by other animals (externally)? No] "Caryopsis with free brittle pericarp; oblong, or obovoid; 12.5 mm long" [Unlikely. Seeds lack means of external attachment]

708	1976. Janzen, D.H.. Why Bamboos Wait so Long to Flower. Annual Review of Ecology and Systematics. 7: 347-391.	[Propagules survive passage through the gut? No. Seeds depredated] "In 1907 Ellis tried to find seed after a minimum of 295 square miles of <i>Cephalostachyum pergracile</i> had a mast crop in lower Burma: Some seed has been collected, but the Karens say that owing to the collection having been left too late, viz., May, it is hard to find, as pheasants, jungle fowl, parrots and doves to say nothing of four-footed animals, have eaten it all up. Some 41/2 baskets have been obtained and it seems fairly good seed. Little of this was found on the ground, however, most being rubbed by hand out of the infrutescences still hanging on the bamboo. It is curious how jungle fowl and pheasants swarm this year where last year they were scarcely to be heard or seen, but then there is any quantity of <i>C. pergracile</i> seed this year. (82)"
801	2005. Marod, D./Neumrat, V./Panuthai, S./Hiroshi, T./Sahunalu, P.. The Forest Regeneration after Gregarious Flowering of Bamboo (<i>Cephalostachyum pergracile</i>) at Mae Klong Watershed Research Station, Kanchanaburi. Kasetsart Journal (Nat. Sci.). 39: 588-593.	[Prolific seed production (>1000/m2)? Possibly] "The average seed production was very high about 2,442±1,243 seed/m2 after flowering. However, only 12.8 % of total seed production could be germinated and classified as sound seeds while the others were uncompleted as empty seeds or insect attack about 64.5 and 22.7 %, respectively." [High seed production, but large percentage of seeds not viable or depredated]
802	2008. Royal Botanic Gardens Kew. Seed Information Database (SID). Version 7.1. http://data.kew.org/sid/	[Evidence that a persistent propagule bank is formed (>1 yr)? Unknown]
803	2013. WRA Specialist. Personal Communication.	[Well controlled by herbicides? Unknown] No information on herbicide efficacy or chemical control of this species
804	1976. Janzen, D.H.. Why Bamboos Wait so Long to Flower. Annual Review of Ecology and Systematics. 7: 347-391.	[Tolerates, or benefits from, mutilation, cultivation, or fire? Yes] "In 1867 Kurz (142) "observed in Burma pygmaean plants of tinwa (<i>Cephalostachyum pergracile</i>) of only about ?12 to 1 foot height, which had been continuously burnt down by jungle fires, and which flowered together with their unhurt companions of 30 to 40 feet high!"
805	2013. WRA Specialist. Personal Communication.	[Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown]

Summary of Risk Traits

High Risk / Undesirable Traits

- Thrives in tropical climates
- Produces viable seeds that may be dispersed by gravity, wind or people
- Tolerates many soil types
- Forms dense, extensive patches within native range
- Will resprout after repeated cutting or harvesting of shoots & culms (may be difficult to remove from unwanted areas)

Low Risk / Desirable Traits

- No negative impacts have been documented
- Non-toxic
- Edible shoots
- Landscaping and ornamental value
- A sympodial, or clumping bamboo