

Family: *Doryanthaceae*

Taxon: *Doryanthes excelsa*

Synonym: NA

Common Name: giant lily
flame lily
spear lily
Illawarra lily
Gynea Lily

Questionnaire : current 20090513
Status: Assessor Approved

Assessor: Chuck Chimera
Data Entry Person: Chuck Chimera

Designation: L

WRA Score 0

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| 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 | 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 | 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 | n |
| 403 | Parasitic | y=1, n=0 | n |
| 404 | Unpalatable to grazing animals | y=1, n=-1 | |
| 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 | y |

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| 410 | Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island) | y=1, n=0 | n |
| 411 | Climbing or smothering growth habit | y=1, n=0 | n |
| 412 | Forms dense thickets | y=1, n=0 | |
| 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 | y |
| 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 | y |
| 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 | >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 | |
| 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 | n |
| 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:

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| 101 | 2009. Dimech, A.M./Ades, P.K./Taylor, P.W.J./Cross, R./Ford, R.. Population diversity of <i>Doryanthes excelsa</i> (Doryanthaceae) in eastern Australia. <i>Cunninghamia</i> . 11(2): 213–219. | [Is the species highly domesticated? No] No evidence |
| 102 | 2011. WRA Specialist. Personal Communication. | NA |
| 103 | 2011. WRA Specialist. Personal Communication. | NA |
| 201 | 2009. Dimech, A.M./Ades, P.K./Taylor, P.W.J./Cross, R./Ford, R.. Population diversity of <i>Doryanthes excelsa</i> (Doryanthaceae) in eastern Australia. <i>Cunninghamia</i> . 11(2): 213–219. | [Species suited to tropical or subtropical climate(s) 1-intermediate] " <i>Doryanthes excelsa</i> Corrêa (family Doryanthaceae), Giant Lily or Gynea Lily, is a spectacular and morphologically distinctive monocotyledon endemic to the open sclerophyll Eucalyptus forests of the Central Coast and North Coast of New South Wales, Australia. It is distributed discontinuously from near Wollongong in the south to the hinterland of Coffs Harbour in the north but there as a large gap between the central coast and northern populations." [Mediterranean climate] |
| 202 | 2009. Dimech, A.M./Ades, P.K./Taylor, P.W.J./Cross, R./Ford, R.. Population diversity of <i>Doryanthes excelsa</i> (Doryanthaceae) in eastern Australia. <i>Cunninghamia</i> . 11(2): 213–219. | [Quality of climate match data? 2-high] <i>Doryanthes excelsa</i> Corrêa (family Doryanthaceae), Giant Lily or Gynea Lily, is a spectacular and morphologically distinctive monocotyledon endemic to the open sclerophyll Eucalyptus forests of the Central Coast and North Coast of New South Wales, Australia. It is distributed discontinuously from near Wollongong in the south to the hinterland of Coffs Harbour in the north but there as a large gap between the central coast and northern populations." [Mediterranean climate. Native range well known] |
| 203 | 1998. Riffle, R.L.. <i>The Tropical Look - An Encyclopedia of Dramatic Landscape Plants</i> . Timber Press, Portland, OR | [Broad climate suitability (environmental versatility)? Yes] "The plants are tender to cold but there are mature specimens in zone 9b." |
| 203 | 2007. Australian Native Plant Society. <i>Doryanthes excelsa</i> . http://anpsa.org.au/d-exc.html | [Broad climate suitability (environmental versatility)? Yes] "Although native to the Sydney region, it has proven adaptable to a range of climates...The foliage is frost tolerant but the flowers may be damaged by heavy frost. " |
| 204 | 2000. Smith, J.. <i>Micropropagation of the Gynea Lily</i> . RIRDC Publication No 00/36. Rural Industries Research and Development Corporation, Kingston, AU | [Native or naturalized in regions with tropical or subtropical climates? No evidence for <i>D. excelsa</i>] "The genus <i>Doryanthes</i> occurs only on the east coast of Australia (Newman, 1928; Fairley & Moore, 1989; Nash, 1996) and consists of two species <i>D. excelsa</i> and <i>D. palmeri</i> . <i>Doryanthes excelsa</i> occurs with a limited distribution on the central and mid north coast of NSW (Fairley & Moore, 1989; Nash, 1996), (Figure 1.1) with <i>D. palmeri</i> occurring in northern NSW and southern Queensland on the coastal ranges (Wilson, 1993; Nash, 1996)." |
| 205 | 2003. Elliot, R.. <i>Australian Plants for Mediterranean Climate Gardens</i> . Rosenberg Publishing, Kenthurst, Australia | [Does the species have a history of repeated introductions outside its natural range? Yes] "For truly majestic clump-forming plants there is no Australian genus to rival <i>Doryanthes</i> for planting in Mediterranean and tropical, subtropical and temperate regions. They have proved extremely popular in California and in other Mediterranean regions of the world." |
| 301 | 2007. Randall, R.P.. <i>Global Compendium of Weeds - Index</i> [Online Database]. http://www.hear.org/gcw/ | [Naturalized beyond native range? No] No evidence |
| 302 | 2007. Randall, R.P.. <i>Global Compendium of Weeds - Index</i> [Online Database]. http://www.hear.org/gcw/ | [Garden/amenity/disturbance weed? No] No evidence |
| 303 | 2007. Randall, R.P.. <i>Global Compendium of Weeds - Index</i> [Online Database]. http://www.hear.org/gcw/ | [Agricultural/forestry/horticultural weed? No] No evidence |
| 304 | 2007. Randall, R.P.. <i>Global Compendium of Weeds - Index</i> [Online Database]. http://www.hear.org/gcw/ | [Environmental weed? No] No evidence |
| 305 | 2006. Australian National Botanic Gardens. <i>Growing Native Plants - Doryanthes excelsa</i> . http://www.anbg.gov.au/gnp/gnp12/doryanthes-excelsa.html | [Congeneric weed? No] "A member of the family Agavaceae, <i>D. excelsa</i> belongs to an endemic genus of two species, of which it is the more widely cultivated. The other species, <i>D. palmeri</i> , occurs in the McPherson Ranges of south-eastern Queensland." |
| 401 | 1998. Riffle, R.L.. <i>The Tropical Look - An Encyclopedia of Dramatic Landscape Plants</i> . Timber Press, Portland, OR | [Produces spines, thorns or burrs? No] "The leaves have the appearance of the tough swords of <i>Agave</i> species, but they are fleshier and not spiny." |

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| 401 | 2002. Denham, A.J./Auld, T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. Australian Journal of Botany. 50(5): 545 - 557. | [Produces spines, thorns or burrs? No] "Doryanthes excelsa Correa (Gynea lily - Doryanthaceae) is a large perennial rosette plant with a bulbous rhizome and long broad linear leaves up to 3 m long" |
| 402 | 1998. Riffle, R.L.. The Tropical Look - An Encyclopedia of Dramatic Landscape Plants. Timber Press, Portland, OR | [Allelopathic? No] No evidence |
| 402 | 2003. Elliot, R.. Australian Plants for Mediterranean Climate Gardens. Rosenberg Publishing, Kenthurst, Australia | [Allelopathic? No] No evidence |
| 402 | 2009. Dimech, A.M./Ades, P.K./Taylor, P.W.J./Cross, R./Ford, R.. Population diversity of Doryanthes excelsa (Doryanthaceae) in eastern Australia. Cunninghamia. 11(2): 213-219. | [Allelopathic? No] No evidence |
| 403 | 2002. Denham, A.J./Auld, T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. Australian Journal of Botany. 50(5): 545 - 557. | [Parasitic? No] "Doryanthes excelsa Correa (Gynea lily - Doryanthaceae) is a large perennial rosette plant with a bulbous rhizome and long broad linear leaves up to 3 m long" |
| 404 | 2011. WRA Specialist. Personal Communication. | [Unpalatable to grazing animals? Unknown] |
| 405 | 2002. Denham, A.J./Auld, T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. Australian Journal of Botany. 50(5): 545 - 557. | [Toxic to animals? No] No evidence |
| 405 | 2003. Elliot, R.. Australian Plants for Mediterranean Climate Gardens. Rosenberg Publishing, Kenthurst, Australia | [Toxic to animals? No] No evidence |
| 405 | 2011. PlantNET. New South Wales Flora Online - Doryanthes excelsa Corrêa. Royal Botanic Gardens & Domain Trust,, Sydney http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Doryanthes-excelsa | [Toxic to animals? No] No evidence |
| 406 | 2006. Australian National Botanic Gardens. Growing Native Plants - Doryanthes excelsa. http://www.anbg.gov.au/gnp/gnp12/doryanthes-excelsa.html | [Host for recognized pests and pathogens? No] "D. excelsa is seldom attacked by pests or diseases, although the flower-head may occasionally be damaged by birds feeding on its nectar." |
| 407 | 2003. Powell, G.. Hunter Valley bushwalks. Kingsclear Books, Alexandria, Australia | [Causes allergies or is otherwise toxic to humans? No evidence] "The Aboriginal people perfected a way of washing the toxins from the spectacular clusters of orange coloured seeds so that they were no longer poisonous, and could be eaten." [No other evidence of toxicity found, and toxicity depends on consumption of seeds] |
| 407 | 2011. The Royal Botanic Gardens & Domain Trust. Doryanthes excelsa. http://www.rbgsyd.nsw.gov.au/education/Resources/bush_foods/Doryanthes_excelsa | [Causes allergies or is otherwise toxic to humans? No evidence] "The roots can be harvested, roasted and made into a cake. The young flower spikes (when approximately 0.5 m high) can be roasted and eaten. The leaves contain fibres, which have been used for brush making and matting (Maiden 1889)." |
| 408 | 2002. Denham, A.J./Auld, T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. Australian Journal of Botany. 50(5): 545 - 557. | [Creates a fire hazard in natural ecosystems? Unknown] "It grows in dry sclerophyll forests and woodlands on soils derived from sandstone containing some clay...The species survives fire by having apical buds protected in underground leaf bases." |
| 408 | 2011. Cactus and Succulent Society of America. Doryanthaceae. http://www.cssainc.org/index.php?option=com_content&task=view&id=452&Itemid=290 | [Creates a fire hazard in natural ecosystems? Unknown] "Mature plants generally survive bushfires. Germination of the seed is generally aided by fire or smoke water." [adapted to fire prone ecosystems, but unknown if plants can increase fire hazard] |
| 409 | 1998. Riffle, R.L.. The Tropical Look - An Encyclopedia of Dramatic Landscape Plants. Timber Press, Portland, OR | [Is a shade tolerant plant at some stage of its life cycle? Yes. Partial shade] "Their culture is similar to that for Agave species, but they need more water (with perfect drainage) and flourish in partial shade." |
| 409 | 2007. Australian Native Plant Society. Doryanthes excelsa. http://anpsa.org.au/d-exc.html | [Is a shade tolerant plant at some stage of its life cycle? Yes. Partial shade] "The plant prefers well drained, moist soils in full sun or partial shade." |

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| 409 | 2011. Gardening.aussielandscaping.com.au with Angus Stewart. Gymea Lilies - Doryanthes excelsa. http://gardening.aussielandscaping.com.au/australian-plants/gymea-lilies.shtml | [Is a shade tolerant plant at some stage of its life cycle? Yes] "These are very tough plants that will survive harsh conditions and will grow in positions from full sun through to relatively deep shade, however the less light they receive the less likely it is for them to flower." |
| 410 | 2006. Australian National Botanic Gardens. Growing Native Plants - Doryanthes excelsa. http://www.anbg.gov.au/gnp/gnp12/doryanthes-excelsa.html | [Tolerates a wide range of soil conditions? No] "...must be sited with care to ensure a well drained, deep soil" |
| 410 | 2007. Australian Native Plant Society. Doryanthes excelsa. http://anpsa.org.au/d-exc.html | [[Tolerates a wide range of soil conditions? No] "The plant prefers well drained, moist soils..." |
| 411 | 2002. Denham, A.J./Auld, T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. Australian Journal of Botany. 50(5): 545 - 557. | [Climbing or smothering growth habit? No] "Doryanthes excelsa Correa (Gymea lily - Doryanthaceae) is a large perennial rosette plant with a bulbous rhizome and long broad linear leaves up to 3 m long" |
| 412 | 2002. Ooi, M.. Fire response and seedling emergence patterns of Leucopogon (Epacridaceae) in South-Eastern Australia. University of Wollongong, NSW, Australia | [Forms dense thickets? Unknown] "The dominant overstorey species again was Angophora costata with a mixed and relatively dense understorey including Acacia terminalis, A. ulicifolia, Grevillea mucronulata, Doryanthes excelsa, Leucopogon ericoides and Dodonaea triquetra.' [a component of dense understory vegetation, and clump-forming habit suggests possibility of excluding other vegetation, although no direct evidence was found.] |
| 501 | 2011. PlantNET. New South Wales Flora Online - Doryanthes excelsa Corrêa. Royal Botanic Gardens & Domain Trust,, Sydney http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Doryanthes-excelsa | [Aquatic? No] "Description: Giant rosette plant. Basal leaves numerous, sword-shaped, to 2.5 m long and 10 cm wide, glabrous. " [Terrestrial] |
| 502 | 2011. PlantNET. New South Wales Flora Online - Doryanthes excelsa Corrêa. Royal Botanic Gardens & Domain Trust,, Sydney http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Doryanthes-excelsa | [Grass? No] Doryanthaceae |
| 503 | 2011. PlantNET. New South Wales Flora Online - Doryanthes excelsa Corrêa. Royal Botanic Gardens & Domain Trust,, Sydney http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Doryanthes-excelsa | [Nitrogen fixing woody plant? No] Doryanthaceae |
| 504 | 2006. Australian National Botanic Gardens. Growing Native Plants - Doryanthes excelsa. http://www.anbg.gov.au/gnp/gnp12/doryanthes-excelsa.html | [Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? Yes, behaves as a functional geophyte] "Each plant grows from a thickened under-ground stem which is gradually pulled deeper and deeper into the ground by the roots con-tracting during periods of dry weather. For this reason the plants do best in deep soil." |
| 504 | 2011. Gardening.aussielandscaping.com.au with Angus Stewart. Gymea Lilies - Doryanthes excelsa. http://gardening.aussielandscaping.com.au/australian-plants/gymea-lilies.shtml | [Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? Yes, behaves as a functional geophyte] "Doryanthes grow from a large bulb-like structure that buries itself up to half a metre in the soil, allowing the plant to survive through drought and bushfires in the wild." |
| 601 | 2007. Australian Native Plant Society. Doryanthes excelsa. http://anpsa.org.au/d-exc.html | [Evidence of substantial reproductive failure in native habitat? No] "Not considered to be at risk in the wild." |
| 602 | 2006. Australian National Botanic Gardens. Growing Native Plants - Doryanthes excelsa. http://www.anbg.gov.au/gnp/gnp12/doryanthes-excelsa.html | [Produces viable seed? Yes] "Propagation is by division of established plants or from seed. Seed will germinate readily within 2 months if only a year or two old and is best sown in autumn." |

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| 603 | 2001. Perry, D.A.. The distribution, relative abundance and conservation status of <i>Doryanthes palmeri</i> (Doryanthaceae) in New South Wales. <i>Cunninghamia</i> . 7(2): 183-194. | [Hybridizes naturally? Unknown] "Doryanthaceae is an Australian endemic family with one genus <i>Doryanthes</i> and two species <i>D. palmeri</i> W. Hill ex Benth. And <i>D. excelsa</i> Corrêa. <i>Doryanthes excelsa</i> (Gymea Lily) grows in the Sydney area of New South Wales (NSW). The distribution, life history and ecology of this species have previously been investigated (e.g. Newman 1928, 1929; Patil and Pai 1981; Nash 1996). In contrast, <i>Doryanthes palmeri</i> , the focus of this paper, is less well known. The only publication on <i>D. palmeri</i> was a description of its horticultural merits with a brief mention of its distribution in south-east Queensland (Forster 1995)." |
| 604 | 2009. Dimech, A.M./Ades, P.K./Taylor, P.W.J./Cross, R./Ford, R.. Population diversity of <i>Doryanthes excelsa</i> (Doryanthaceae) in eastern Australia. <i>Cunninghamia</i> . 11(2): 213–219. | [Self-compatible or apomictic? Yes, although predominantly outbreeding] "In the predominantly outbreeding (Newman 1929) <i>Doryanthes excelsa</i> , there are generation times that could counteract bottlenecks and maintain intrapopulation diversity." |
| 605 | 1998. Riffle, R.L.. The Tropical Look - An Encyclopedia of Dramatic Landscape Plants. Timber Press, Portland, OR | [Requires specialist pollinators? No] "The individual flowers are six-petaled and scarlet to pinkish red, and look like narrow-petaled <i>Crinum</i> flowers. Furthermore, they exude nectar and are fought over by birds and insects." [Suggests that birds and insects may pollinate plants] |
| 605 | 2009. Dimech, A.M./Ades, P.K./Taylor, P.W.J./Cross, R./Ford, R.. Population diversity of <i>Doryanthes excelsa</i> (Doryanthaceae) in eastern Australia. <i>Cunninghamia</i> . 11(2): 213–219. | [Requires specialist pollinators? No] "According to Nash (1996) <i>Doryanthes excelsa</i> is pollinated by Cockatoos (<i>Cacatua galerita</i>) and Pied Currawongs (<i>Strepera graculina</i>) as well as smaller bird species that could carry pollen between the populations." |
| 606 | 1998. Riffle, R.L.. The Tropical Look - An Encyclopedia of Dramatic Landscape Plants. Timber Press, Portland, OR | [Reproduction by vegetative fragmentation? Yes] The plants sucker slowly and remain confined to their original space allotment for several years. The offshoots may be removed for propagation purposes. Occasionally the flower spikes produce bulblets along with the flowers." |
| 607 | 2000. Smith, J.. Micropropagation of the Gymea Lily. RIRDC Publication No 00/36. Rural Industries Research and Development Corporation, Kingston, AU | [Minimum generative time (years)? 4+] "The single most constraining factor on the commercial development and horticultural use of <i>Doryanthes</i> is the 10 years or longer lead-time from seed to first flowering." |
| 607 | 2006. Australian National Botanic Gardens. Growing Native Plants - <i>Doryanthes excelsa</i> . http://www.anbg.gov.au/gnp/gnp12/doryanthes-excelsa.html | [Minimum generative time (years)? 4+] "...plants grown from seed will not flower until about 8 years of age." |
| 607 | 2009. Dimech, A.M./Ades, P.K./Taylor, P.W.J./Cross, R./Ford, R.. Population diversity of <i>Doryanthes excelsa</i> (Doryanthaceae) in eastern Australia. <i>Cunninghamia</i> . 11(2): 213–219. | [Minimum generative time (years)? 4+] " <i>Doryanthes excelsa</i> may take up to 10 years from germination to flowering, and will live for decades." |
| 701 | 2002. Denham, A.J./Auld , T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. <i>Australian Journal of Botany</i> . 50(5): 545 - 557. | [Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)? No] "The seeds of <i>D. excelsa</i> are disc-like, about 15 mm in diameter, 2 mm thick, have a dry spongy texture and weigh approximately 43 mg (Westoby et al. 1990; Nash 1996; A. J. Denham, pers. Obs.)...Westoby et al. (1990) considered <i>T. speciosissima</i> to be adapted for wind dispersal, but could only suggest that the spongy texture of <i>D. excelsa</i> seed could serve for wind or water dispersal. Initial seed fall from dehisced follicles in both species is passive and movement in the air appears likely to be the main means of dispersal away from the infructescence." [No evidence or means of external attachment] |
| 702 | 1998. Riffle, R.L.. The Tropical Look - An Encyclopedia of Dramatic Landscape Plants. Timber Press, Portland, OR | [Propagules dispersed intentionally by people? Yes] Grown as an ornamental |
| 702 | 2009. Dimech, A.M./Ades, P.K./Taylor, P.W.J./Cross, R./Ford, R.. Population diversity of <i>Doryanthes excelsa</i> (Doryanthaceae) in eastern Australia. <i>Cunninghamia</i> . 11(2): 213–219. | [Propagules dispersed intentionally by people? Yes] " <i>Doryanthes excelsa</i> is highly prized domestically by the Australian floricultural industry and has considerable economic potential as a high-value, cut-flower export crop (Smith 2000). It is also increasingly sought as a landscape plant." |
| 703 | 2002. Denham, A.J./Auld , T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. <i>Australian Journal of Botany</i> . 50(5): 545 - 557. | [Propagules likely to disperse as a produce contaminant? No] "The seeds of <i>D. excelsa</i> are disc-like, about 15 mm in diameter, 2 mm thick, have a dry spongy texture and weigh approximately 43 mg" [No evidence, and large seeds unlikely to contaminate produce] |
| 704 | 2002. Denham, A.J./Auld , T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. <i>Australian Journal of Botany</i> . 50(5): 545 - 557. | [Propagules adapted to wind dispersal? Yes] "The seeds of <i>D. excelsa</i> are disc-like, about 15 mm in diameter, 2 mm thick, have a dry spongy texture and weigh approximately 43 mg (Westoby et al. 1990; Nash 1996; A. J. Denham, pers. Obs.)...Westoby et al. (1990) considered <i>T. speciosissima</i> to be adapted for wind dispersal, but could only suggest that the spongy texture of <i>D. excelsa</i> seed could serve for wind or water dispersal. Initial seed fall from dehisced follicles in both species is passive and movement in the air appears likely to be the main means of dispersal away from the infructescence." |

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| 704 | 2006. Australian National Botanic Gardens. Growing Native Plants - <i>Doryanthes excelsa</i> . http://www.anbg.gov.au/gnp/gnp12/doryanthes-excelsa.html | [Propagules adapted to wind dispersal? Yes] "The fruit is a woody capsule which splits open on ripening in January or February to release the brown, flattened and slightly winged seeds." [short-distances] |
| 705 | 2002. Denham, A.J./Auld, T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. Australian Journal of Botany. 50(5): 545 - 557. | [Propagules water dispersed? Possibly] "Westoby et al. (1990) considered <i>T. speciosissima</i> to be adapted for wind dispersal, but could only suggest that the spongy texture of <i>D. excelsa</i> seed could serve for wind or water dispersal." |
| 706 | 2002. Denham, A.J./Auld, T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. Australian Journal of Botany. 50(5): 545 - 557. | [Propagules bird dispersed? No] "The seeds of <i>D. excelsa</i> are disc-like, about 15 mm in diameter, 2 mm thick, have a dry spongy texture and weigh approximately 43 mg (Westoby et al. 1990; Nash 1996; A. J. Denham, pers. Obs.)...Westoby et al. (1990) considered <i>T. speciosissima</i> to be adapted for wind dispersal, but could only suggest that the spongy texture of <i>D. excelsa</i> seed could serve for wind or water dispersal. Initial seed fall from dehisced follicles in both species is passive and movement in the air appears likely to be the main means of dispersal away from the infructescence." |
| 707 | 2002. Denham, A.J./Auld, T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. Australian Journal of Botany. 50(5): 545 - 557. | [Propagules dispersed by other animals (externally)? No] "The seeds of <i>D. excelsa</i> are disc-like, about 15 mm in diameter, 2 mm thick, have a dry spongy texture and weigh approximately 43 mg (Westoby et al. 1990; Nash 1996; A. J. Denham, pers. Obs.)...Westoby et al. (1990) considered <i>T. speciosissima</i> to be adapted for wind dispersal, but could only suggest that the spongy texture of <i>D. excelsa</i> seed could serve for wind or water dispersal. Initial seed fall from dehisced follicles in both species is passive and movement in the air appears likely to be the main means of dispersal away from the infructescence." [No evidence, and no means of external attachment] |
| 708 | 2002. Denham, A.J./Auld, T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. Australian Journal of Botany. 50(5): 545 - 557. | [Propagules survive passage through the gut? Unknown] "The seeds of <i>D. excelsa</i> are disc-like, about 15 mm in diameter, 2 mm thick, have a dry spongy texture and weigh approximately 43 mg (Westoby et al. 1990; Nash 1996; A. J. Denham, pers. Obs.)...Westoby et al. (1990) considered <i>T. speciosissima</i> to be adapted for wind dispersal, but could only suggest that the spongy texture of <i>D. excelsa</i> seed could serve for wind or water dispersal. Initial seed fall from dehisced follicles in both species is passive and movement in the air appears likely to be the main means of dispersal away from the infructescence." [No evidence that seeds are consumed] |
| 801 | 2002. Denham, A.J./Auld, T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. Australian Journal of Botany. 50(5): 545 - 557. | [Prolific seed production (>1000/m ²)? No] "Total post-fire seed production by <i>D. excelsa</i> was considerably greater than by <i>T. speciosissima</i> (e.g. 9.9 v 2.0 seeds per m ² , 2350 v. 430 seeds per flowering plant for <i>D. excelsa</i> and <i>T. speciosissima</i> , respectively, at Site 1). [Field data indicate seed densities are low] |
| 802 | 2002. Denham, A.J./Auld, T.D.. Flowering, seed dispersal, seed predation and seedling recruitment in two pyrogenic flowering resprouters. Australian Journal of Botany. 50(5): 545 - 557. | [Evidence that a persistent propagule bank is formed (>1 yr)? No] "Table 5...Soil seed bank...<1 year" |
| 803 | 2011. WRA Specialist. Personal Communication. | [Well controlled by herbicides? Unknown] No information on chemical control of this species, and herbicide efficacy unknown |
| 804 | 2009. Dimech, A.M./Ades, P.K./Taylor, P.W.J./Cross, R./Ford, R.. Population diversity of <i>Doryanthes excelsa</i> (Doryanthaceae) in eastern Australia. Cunninghamia. 11(2): 213–219. | [Tolerates, or benefits from, mutilation, cultivation, or fire? Yes] " <i>Doryanthes excelsa</i> may take up to 10 years from germination to flowering, and will live for decades. Most individuals will survive fires (the most common and dramatic disturbance event in their ecosystem) by resprouting after the forest has burnt (Denham & Auld 2002)." |
| 805 | 2011. WRA Specialist. Personal Communication. | [Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown] |