

Taxon: <i>Dahlia 'Café au Lait'</i>	Family: Asteraceae
Common Name(s): 'Cafe Au Lait' Dahlia	Synonym(s):

Assessor: Chuck Chimera	Status: Assessor Approved	End Date: 22 Nov 2022
WRA Score: -4.0	Designation: L	Rating: Low Risk

Keywords: Hybrid Cultivar, Non-Seeding, Toxic Properties, Tuberos Roots, Vegetatively Propagated

Qsn #	Question	Answer Option	Answer
101	Is the species highly domesticated?	y=-3, n=0	n
102	Has the species become naturalized where grown?		
103	Does the species have weedy races?		
201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"	(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
202	Quality of climate match data	(0-low; 1-intermediate; 2-high) (See Appendix 2)	Low
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	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		
401	Produces spines, thorns or burrs	y=1, n=0	n
402	Allelopathic		
403	Parasitic	y=1, n=0	n
404	Unpalatable to grazing animals	y=1, n=-1	y
405	Toxic to animals	y=1, n=0	y
406	Host for recognized pests and pathogens		
407	Causes allergies or is otherwise toxic to humans		
408	Creates a fire hazard in natural ecosystems	y=1, n=0	n
409	Is a shade tolerant plant at some stage of its life cycle		
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y=1, n=0	y

Qsn #	Question	Answer Option	Answer
411	Climbing or smothering growth habit	y=1, n=0	n
412	Forms dense thickets	y=1, n=0	n
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	n
503	Nitrogen fixing woody plant	y=1, n=0	n
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	y=1, n=0	y
601	Evidence of substantial reproductive failure in native habitat		
602	Produces viable seed	y=1, n=-1	n
603	Hybridizes naturally		
604	Self-compatible or apomictic		
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	y
607	Minimum generative time (years)		
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	n
702	Propagules dispersed intentionally by people	y=1, n=-1	y
703	Propagules likely to disperse as a produce contaminant	y=1, n=-1	n
704	Propagules adapted to wind dispersal	y=1, n=-1	n
705	Propagules water dispersed	y=1, n=-1	n
706	Propagules bird dispersed	y=1, n=-1	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/m ²)	y=1, n=-1	n
802	Evidence that a persistent propagule bank is formed (>1 yr)		
803	Well controlled by herbicides		
804	Tolerates, or benefits from, mutilation, cultivation, or fire		
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)		

Supporting Data:

Qsn #	Question	Answer
101	Is the species highly domesticated?	n
	Source(s)	Notes
	Gardenia. (2022). Dahlia 'Cafe Au Lait'. https://www.gardenia.net/plant/dahlia-cafe-au-lait . [Accessed 17 Nov 2022]	"Year Introduced: 1968 Country of Origin: Holland Hybridizer or Originator: BRUIDEGOM"

102	Has the species become naturalized where grown?	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	NA

103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	NA

201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"	High
	Source(s)	Notes
	Gardenia. (2022). Dahlia 'Cafe Au Lait'. https://www.gardenia.net/plant/dahlia-cafe-au-lait . [Accessed 17 Nov 2022]	"Hardiness 8 – 11"
	Kadereit, J.W. & Jeffrey, C. (eds.). (2010). The Families and genera of vascular plants. Volume VIII. Flowering Plants. Eudicots: Asterales. Springer-Verlag, Berlin, Heidelberg, New York	[Dahlia genus] "Approximately 40 species, Mexico, Central America, Colombia, widely cultivated."

202	Quality of climate match data	Low
	Source(s)	Notes
	The National Gardening Association. (2022). Dahlia 'Cafe au Lait'. https://garden.org/plants/view/137664/Dahlia-Cafe-au-Lait/ . [Accessed 17 Nov 2022]	"Country of Origin: Holland Hybridizer or Originator: BRUIDEGOM"

Qsn #	Question	Answer
203	Broad climate suitability (environmental versatility)	n
	Source(s)	Notes
	K. van Bourgondien. (2022). Dinnerplate Dahlia Café au Lait. https://www.dutchbulbs.com/product/dinnerplate-dahlia-lait-cafe-au . [Accessed 21 Nov 2022]	"Dahlias are not hardy. Dig the tubers in fall and store in dry peatmoss in a cool, dry and frost free location. Dry tubers for a few days (preferably outside) before storing!"
	Gardenia. (2022). Dahlia 'Café Au Lait'. https://www.gardenia.net/plant/dahlia-cafe-au-lait . [Accessed 17 Nov 2022]	"Hardiness 8 – 11"
	DK. (2014). Encyclopedia of Garden Plants for Every Location. Penguin Random House, New York, NY	"Z9- 11"

204	Native or naturalized in regions with tropical or subtropical climates	y
	Source(s)	Notes
	Kadereit, J.W. & Jeffrey, C. (eds.). (2010). The Families and genera of vascular plants. Volume VIII. Flowering Plants. Eudicots: Asterales. Springer-Verlag, Berlin, Heidelberg, New York	[Genus description] "Approximately 40 species, Mexico, Central America, Colombia, widely cultivated."

205	Does the species have a history of repeated introductions outside its natural range?	y
	Source(s)	Notes
	Dave's Garden. (2022). Heirloom Dahlia, Informal Decorative Dahlia 'Café au Lait' - Dahlia . https://davesgarden.com/guides/pf/go/90140/ . [Accessed 18 Nov 2022]	"This plant is said to grow outdoors in the following regions: Sebastopol, California Albany, Oregon Corvallis, Oregon Vancouver, Washington"
	WRA Specialist. (2022). Personal Communication	Promoted on a number of horticultural websites

301	Naturalized beyond native range	n
	Source(s)	Notes
	Imada, C. (2019). Hawaiian Naturalized Vascular Plants Checklist (February 2019 update). Bishop Museum Technical Report 69. Bishop Museum, Honolulu, HI	No evidence
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence
	WRA Specialist. (2022). Personal Communication	No evidence found

Qsn #	Question	Answer
302	Garden/amenity/disturbance weed	n
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence
	CABI. (2022). Invasive Species Compendium. Wallingford, UK: CAB International. www.cabi.org/isc	No evidence

303	Agricultural/forestry/horticultural weed	n
	Source(s)	Notes
	CABI. (2022). Invasive Species Compendium. Wallingford, UK: CAB International. www.cabi.org/isc	No evidence
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

304	Environmental weed	n
	Source(s)	Notes
	CABI. (2022). Invasive Species Compendium. Wallingford, UK: CAB International. www.cabi.org/isc	No evidence
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

305	Congeneric weed	n
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	There are a few species that are reported to be naturalized and/or weeds, but evidence of negative impacts has not been corroborated.

401	Produces spines, thorns or burrs	n
	Source(s)	Notes
	Kadereit, J.W. & Jeffrey, C. (eds.). (2010). The Families and genera of vascular plants. Volume VIII. Flowering Plants. Eudicots: Asterales. Springer-Verlag, Berlin, Heidelberg, New York	[Genus description] "Tuberous perennial herbs or shrubs, one species epiphytic, sometimes rupicolous. Leaves opposite, sometimes whorled, sometimes semisucculent, blades simple to 1–3-pinnatifid, ovate to deltate in outline, rarely cordate. Capitula solitary or loosely aggregated in paniculiformcymes, radiate, nodding."
	DK. (2014). Encyclopedia of Garden Plants for Every Location. Penguin Random House, New York, NY	[No evidence] "Dahlia 'Café au lait' deCoratiVe dahlia This clump-forming tuber has toothed-edged dark green leaves. From midsummer to fall, it bears large, peach-flushed, cream-colored double flowers. Deadhead to encourage more blooms. lift the tubers in winter."

Qsn #	Question	Answer
402	Allelopathic	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	Unknown. No evidence found

403	Parasitic	n
	Source(s)	Notes
	Kadereit, J.W. & Jeffrey, C. (eds.). (2010). The Families and genera of vascular plants. Volume VIII. Flowering Plants. Eudicots: Asterales. Springer-Verlag, Berlin, Heidelberg, New York	[Genus description] "Tuberous perennial herbs or shrubs, one species epiphytic, sometimes rupicolous. Leaves opposite, sometimes whorled, sometimes semisucculent, blades simple to 1–3 -pinnatifid, ovate to deltate in outline, rarely cordate."

404	Unpalatable to grazing animals	y
	Source(s)	Notes
	K. van Bourgondien. (2022). Dinnerplate Dahlia Café au Lait. https://www.dutchbulbs.com/product/dinnerplate-dahlia-lait-cafe-au . [Accessed 21 Nov 2022]	"Deer tend to avoid." ... "Deer Resistant"
	The National Gardening Association. (2022). Dahlia 'Café au Lait'. https://garden.org/plants/view/137664/Dahlia-Cafe-au-Lait/ . [Accessed 21 Nov 2022]	"Resistances: Deer Resistant"

405	Toxic to animals	y
	Source(s)	Notes
	Dave's Garden. (2022). Heirloom Dahlia, Informal Decorative Dahlia 'Café au Lait' - Dahlia . https://davesgarden.com/guides/pf/go/90140/ . [Accessed 21 Nov 2022]	"Danger: Parts of plant are poisonous if ingested Handling plant may cause skin irritation or allergic reaction"
	Gardenia. (2022). Dahlia 'Café Au Lait'. https://www.gardenia.net/plant/dahlia-cafe-au-lait . [Accessed 21 Nov 2022]	"Toxic to dogs, toxic to cats, toxic to horses."

Qsn #	Question	Answer
406	Host for recognized pests and pathogens	
	Source(s)	Notes
	<p>PictureThis. (2022). Dahlia 'Cafe Au Lait Rose' Care Guide. https://www.picturethisai.com/care/Dahlia__Cafe_Au_Lait_Rose_.html. [Accessed 21 Nov 2022]</p>	<p>"Pests and Diseases Powdery Mildew Gray Mold Spider Mites European Corn Borers Other Uncommon Pests or Diseases Moreover, there are some less common pests and diseases listed below that need your attention Stem Rot Mosaic Disease Wilt Disease Charcoal Rot Southern Blight Nematodes"</p>

407	Causes allergies or is otherwise toxic to humans	
	Source(s)	Notes
	<p>Dave's Garden. (2022). Heirloom Dahlia, Informal Decorative Dahlia 'Cafe au Lait' - Dahlia . https://davesgarden.com/guides/pf/go/90140/. [Accessed 21 Nov 2022]</p>	<p>"Danger: Parts of plant are poisonous if ingested Handling plant may cause skin irritation or allergic reaction"</p>
	<p>Spoerke, D.G. & Smolinske, S.C. (1990). Toxicity of Houseplants. CRC Press, Boca Raton, FL</p>	<p>[Possible cause of dermatitis] "Toxic Class - Dahlia species contain phototoxic polyacetylene compounds. Specific Mechanism - Dermatitis may result from the irritating, sensitizing, and phototoxic properties of the polyacetylene group. Potential Manifestations - Skin - Dahlia species are generally considered to be nontoxic. Occupational dermatitis due to handling the tubers, and photodermatitis due to contact with the leaf have been described."</p>

408	Creates a fire hazard in natural ecosystems	n
	Source(s)	Notes
	<p>Vivar-Evans, S., Barradas, V. L., Sánchez-Coronado, M. E., De Buen, A. G., & Orozco-Segovia, A. (2006). Ecophysiology of seed germination of wild Dahlia coccinea (Asteraceae) in a spatially heterogeneous fire-prone habitat. <i>Acta Oecologica</i>, 29(2), 187-195</p>	<p>[Ecology of Dahlia coccinea suggests species are adapted to survive fire, but do not increase fire risk] "D. coccinea was one of the most conspicuous elements after the fire events of 1998 at the reserve of "El Pedregal de San Angel" (Martínez-Mateos, 2001). This species could survive and become successful after a fire event either because its tubers and/or seeds survive as they are protected by soil, and/or because germination is enhanced by fire, which is a common strategy among the species growing in fire-prone habitats (Trabaud, 1987)."</p>
	<p>WRA Specialist. (2022). Personal Communication</p>	<p>An ornamental hybrid with no evidence of naturalization or increased fire risk in natural systems</p>

409	Is a shade tolerant plant at some stage of its life cycle	
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Qsn #	Question	Answer
	Source(s)	Notes
	Gardenia. (2022).Dahlia 'Cafe Au Lait'. https://www.gardenia.net/plant/dahlia-cafe-au-lait . [Accessed 21 Nov 2022]	"Best flowering occurs in full sun, but light shade will be welcomed in hot summer areas."
	PictureThis. (2022). Dahlia 'Cafe Au Lait Rose' Care Guide. https://www.picturethisai.com/care/Dahlia__Cafe_Au_Lait_Rose_.html . [Accessed 21 Nov 2022]	"Dahlia 'Cafe Au Lait Rose' likes to grow in half-shade environments, as too strong of sunlight is bad for blooming, and 10-12 hours of sunlight is most suitable. Direct sunlight should be avoided when cultivating seedlings in summer. However, placing for long periods in the shade can also lead to poor growth, weak roots, thin leaves, thin stems, small flowers, light color, and even no blossoming."
	The National Gardening Association. (2022). Dahlia 'Cafe au Lait'. https://garden.org/plants/view/137664/Dahlia-Cafe-au-Lait/ . [Accessed 21 Nov 2022]	"Sun Requirements: Full Sun"

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y
	Source(s)	Notes
	Gardenia. (2022).Dahlia 'Cafe Au Lait'. https://www.gardenia.net/plant/dahlia-cafe-au-lait . [Accessed 21 Nov 2022]	"Soil Type Clay, Loam, Sand Soil pH Acid, Alkaline, Neutral Soil Drainage Moist but Well-Drained"
	K. van Bourgondien. (2022). Dinnerplate Dahlia Café au Lait. https://www.dutchbulbs.com/product/dinnerplate-dahlia-lait-cafe-au . [Accessed 21 Nov 2022]	"Will Tolerate: Acidic Soil, Clay Soil, Loamy Soil, Sandy Soil "

411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Kadereit, J.W. & Jeffrey, C. (eds.). (2010). The Families and genera of vascular plants. Volume VIII. Flowering Plants. Eudicots: Asterales. Springer-Verlag, Berlin, Heidelberg, New York	[Genus description] "Tuberous perennial herbs or shrubs, one species epiphytic, sometimes rupicolous. Leaves opposite, sometimes whorled, sometimes semisucculent, blades simple to 1–3-pinnatifid, ovate to deltate in outline, rarely cordate."

412	Forms dense thickets	n
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	An ornamental hybrid with no evidence of naturalization or formation of dense thickets in natural ecosystems

501	Aquatic	n
	Source(s)	Notes
	Kadereit, J.W. & Jeffrey, C. (eds.). (2010). The Families and genera of vascular plants. Volume VIII. Flowering Plants. Eudicots: Asterales. Springer-Verlag, Berlin, Heidelberg, New York	[Terrestrial genus] "Tuberous perennial herbs or shrubs, one species epiphytic, sometimes rupicolous. Leaves opposite, sometimes whorled, sometimes semisucculent, blades simple to 1–3-pinnatifid, ovate to deltate in outline, rarely cordate."

502	Grass	n
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Qsn #	Question	Answer
	Source(s)	Notes
	USDA, Agricultural Research Service, National Plant Germplasm System. (2022). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. https://npgsweb.ars-grin.gov/ . [Accessed 18 Nov 2022]	"Genus: Dahlia Family: Asteraceae (alt. Compositae) Subfamily: Asteroideae Tribe: Coreopsideae"

503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	USDA, Agricultural Research Service, National Plant Germplasm System. (2022). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. https://npgsweb.ars-grin.gov/ . [Accessed 18 Nov 2022]	"Genus: Dahlia Family: Asteraceae (alt. Compositae) Subfamily: Asteroideae Tribe: Coreopsideae"

504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	y
	Source(s)	Notes
	Kadereit, J.W. & Jeffrey, C. (eds.). (2010). The Families and genera of vascular plants. Volume VIII. Flowering Plants. Eudicots: Asterales. Springer-Verlag, Berlin, Heidelberg, New York	[Genus description] "Tuberous perennial herbs or shrubs, one species epiphytic, sometimes rupicolous."

601	Evidence of substantial reproductive failure in native habitat	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	NA. Artificial hybrid

602	Produces viable seed	n
	Source(s)	Notes
	Dave's Garden. (2022). Heirloom Dahlia, Informal Decorative Dahlia 'Cafe au Lait' - Dahlia . https://davesgarden.com/guides/pf/go/90140/ . [Accessed 18 Nov 2022]	"Propagation Methods: By dividing rhizomes, tubers, corms or bulbs (including offsets)" ... "Seed Collecting: N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed"
	The National Gardening Association. (2022). Dahlia 'Cafe au Lait'. https://garden.org/plants/view/137664/Dahlia-Cafe-au-Lait/ . [Accessed 18 Nov 2022]	"Propagation: Other methods: Division Other: Propagate by taking cuttings of newly emerged shoots"

Qsn #	Question	Answer
603	Hybridizes naturally	
	Source(s)	Notes
	The National Gardening Association. (2022). Dahlia 'Café au Lait'. https://garden.org/plants/view/137664/Dahlia-Cafe-au-Lait/ . [Accessed 21 Nov 2022]	[Of hybrid origin. No evidence of crossing with other species or cultivars] "Year Introduced: 1968 Country of Origin: Holland Hybridizer or Originator: BRUIDEGOM"

604	Self-compatible or apomictic	
	Source(s)	Notes
	Behr, H., & Debener, T. (2004). Novel breeding strategies for ornamental dahlias I: Analysis of the Dahlia <i>variabilis</i> breeding system with molecular markers. <i>European Journal of Horticultural Science</i> , 69, 177-183	[Possibly, although seed set in Dahlia 'Café au Lait' may be limited or absent] "despite an old debate about the self-fertility of dahlias some genotypes can be easily self pollinated and therefore do not possess a self incompatibility system"

605	Requires specialist pollinators	n
	Source(s)	Notes
	Vernon, A. (2014). <i>The Plant Lover's Guide to Dahlias</i> . Timber Press, Portland, OR	[General description of Dahlia pollinators] "The third tip concerns hand pollination versus natural pollination. Our natural pollinators, particularly many species of bees and hoverflies, are exceptional pollinators of dahlias. They do a great job of visiting the tiny florets that make up the dahlia flower as they mature over time. Some breeders like to leave it to the bees and make sure that they grow only dahlia plants with carefully selected characteristics across their plot to lessen the chances of pollen from an undesirable male entering their patch."

606	Reproduction by vegetative fragmentation	y
	Source(s)	Notes
	Dave's Garden. (2022). Heirloom Dahlia, Informal Decorative Dahlia 'Café au Lait' - Dahlia . https://davesgarden.com/guides/pf/go/90140/ . [Accessed]	"Propagation Methods: By dividing rhizomes, tubers, corms or bulbs (including offsets)"

Qsn #	Question	Answer
	<p>PictureThis. (2022). Dahlia 'Cafe Au Lait Rose' Care Guide. https://www.picturethisai.com/care/Dahlia__Cafe_Au_Lait_Rose_.html. [Accessed]</p>	<p>"The main propagation methods of dahlia 'Cafe Au Lait Rose' include root division, cutting, and sowing. Root division is one of the common methods because it is easy to carry out with a high survival rate and sound growth of the seedling. Take out the stored tubers in early spring, remove the rotted roots, and plant the tubers at 15 °. Wait and divide the tubers when 1 cm buds grow, and then plant them separately. By this method, a tuber may produce about five buds and propagate five seedlings. But the cutting method is the main propagation method of dahlia 'Cafe Au Lait Rose', due to faster rooting and higher survival rate. When the buds on the root tuber grow to 3 - 5 cm and the first pair of leaves on the new bud base spreads, the buds can be cut from the tuber and inserted in moist and clean sandy soil. Water the soil thoroughly after cutting insertion, spray water to keep moisture and maintain the relative humidity at 70%-75%. When the temperature is above 25 °, the survival rate of seedlings is the highest. The buds usually take root after about 1 week. After rooting, it takes about 15 days before they can be transplanted. Sowing is generally used in breeding, and dahlia 'Cafe Au Lait Rose' blooms 1-2 years after sowing."</p>

607	Minimum generative time (years)	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	Unknown. Seed set may be limited or absent, and propagation is primarily through root division

701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	n
	Source(s)	Notes
	Dave's Garden. (2022). Heirloom Dahlia, Informal Decorative Dahlia 'Cafe au Lait' - Dahlia . https://davesgarden.com/guides/pf/go/90140/ . [Accessed 21 Nov 2022]	"N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed"
	Martínez-Orea, Y. et al. (2014). Seed rain as a source of propagules for natural regeneration in a temperate forest in Mexico City. <i>The Journal of the Torrey Botanical Society</i> , 141(2), 135-150	[Dahlia species without obvious dispersal mechanisms] "Barochory was assigned to those diaspores that lack evident specialized dispersal structures and simply fall to the ground due to gravity." ... "Appendix 1. Identified species in the seed rain of plots corresponding to three vegetation types of the MRB temperate forest (Mexico city):" [Dahlia pinnata - DS - dispersal syndrome - Barochory]

702	Propagules dispersed intentionally by people	y
	Source(s)	Notes
	DK. (2014). <i>Encyclopedia of Garden Plants for Every Location</i> . Penguin Random House, New York, NY	"This clump-forming tuber has toothed-edged dark green leaves. From midsummer to fall, it bears large, peach-flushed, cream-colored double flowers. Deadhead to encourage more blooms. Lift the tubers in winter." [Cultivated ornamental plant]

703	Propagules likely to disperse as a produce contaminant	n
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Qsn #	Question	Answer
	Source(s)	Notes
	Dave's Garden. (2022). Heirloom Dahlia, Informal Decorative Dahlia 'Cafe au Lait' - Dahlia . https://davesgarden.com/guides/pf/go/90140/ . [Accessed 21 Nov 2022]	"Propagation Methods: By dividing rhizomes, tubers, corms or bulbs (including offsets)" ... "Seed Collecting: N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed"

704	Propagules adapted to wind dispersal	n
	Source(s)	Notes
	Martínez-Orea, Y. et al. (2014). Seed rain as a source of propagules for natural regeneration in a temperate forest in Mexico City. <i>The Journal of the Torrey Botanical Society</i> , 141(2), 135-150	"Barochory was assigned to those diaspores that lack evident specialized dispersal structures and simply fall to the ground due to gravity." [Related species, <i>Dahlia pinnata</i> , lacks specialized adaptations for dispersal]
	Dave's Garden. (2022). Heirloom Dahlia, Informal Decorative Dahlia 'Cafe au Lait' - Dahlia . https://davesgarden.com/guides/pf/go/90140/ . [Accessed]	"N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed"

705	Propagules water dispersed	n
	Source(s)	Notes
	Dave's Garden. (2022). Heirloom Dahlia, Informal Decorative Dahlia 'Cafe au Lait' - Dahlia . https://davesgarden.com/guides/pf/go/90140/ . [Accessed 21 Nov 2022]	"N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed"
	Martínez-Orea, Y. et al. (2014). Seed rain as a source of propagules for natural regeneration in a temperate forest in Mexico City. <i>The Journal of the Torrey Botanical Society</i> , 141(2), 135-150	[<i>Dahlia</i> species without obvious dispersal mechanisms] "Barochory was assigned to those diaspores that lack evident specialized dispersal structures and simply fall to the ground due to gravity." ... "Appendix 1. Identified species in the seed rain of plots corresponding to three vegetation types of the MRB temperate forest (Mexico city):" [<i>Dahlia pinnata</i> - DS - dispersal syndrome - Barochory]

706	Propagules bird dispersed	n
	Source(s)	Notes
	Martínez-Orea, Y. et al. (2014). Seed rain as a source of propagules for natural regeneration in a temperate forest in Mexico City. <i>The Journal of the Torrey Botanical Society</i> , 141(2), 135-150	"Barochory was assigned to those diaspores that lack evident specialized dispersal structures and simply fall to the ground due to gravity." [<i>Dahlia pinnata</i> , and presumably other species, lack specialized adaptations for dispersal]

707	Propagules dispersed by other animals (externally)	n
	Source(s)	Notes
	Martínez-Orea, Y. et al. (2014). Seed rain as a source of propagules for natural regeneration in a temperate forest in Mexico City. <i>The Journal of the Torrey Botanical Society</i> , 141(2), 135-150	"Barochory was assigned to those diaspores that lack evident specialized dispersal structures and simply fall to the ground due to gravity." [<i>Dahlia pinnata</i> , and presumably other species, lack specialized adaptations for dispersal]

Qsn #	Question	Answer
	Dave's Garden. (2022). Heirloom Dahlia, Informal Decorative Dahlia 'Cafe au Lait' - Dahlia . https://davesgarden.com/guides/pf/go/90140/ . [Accessed 21 Nov 2022]	"N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed"

708	Propagules survive passage through the gut	n
	Source(s)	Notes
	Martínez-Orea, Y. et al. (2014). Seed rain as a source of propagules for natural regeneration in a temperate forest in Mexico City. <i>The Journal of the Torrey Botanical Society</i> , 141(2), 135-150	"Barochory was assigned to those diaspores that lack evident specialized dispersal structures and simply fall to the ground due to gravity." [Dahlia pinnata, and presumably other species, lack specialized adaptations for dispersal]

801	Prolific seed production (>1000/m2)	n
	Source(s)	Notes
	Dave's Garden. (2022). Heirloom Dahlia, Informal Decorative Dahlia 'Cafe au Lait' - Dahlia . https://davesgarden.com/guides/pf/go/90140/ . [Accessed 18 Nov 2022]	"Propagation Methods: By dividing rhizomes, tubers, corms or bulbs (including offsets)" ... "Seed Collecting: N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed"

802	Evidence that a persistent propagule bank is formed (>1 yr)	n
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	Unknown. Seeds may be rare or absent, but plants may persist from tuberous roots

803	Well controlled by herbicides	n
	Source(s)	Notes

Qsn #	Question	Answer
	<p>Southward, R. C., Harrington, K. C., Hampton, J. G., & Han, H. (1998). Selective herbicides for dahlia production. <i>Proceedings Agronomy Society of N.Z.</i> 28: 11-15</p>	<p>[Unknown. No evidence that Dahlias are controlled with herbicides, but some herbicides used to control weeds in Dahlia can harm the cultivated plants] "Herbicide efficacy and tolerance were investigated in 'Figaro' series Hammett dahlias. In the first experiment inter-row applications of oxyfluorfen, oxyfluorfen plus oryzalin, oxadiazon, and oxadiazon plus simazine herbicide treatments to two month old plants did not affect field grown tuber yields, or subsequent forced re-sprouting under glasshouse conditions. Trifluralin and oryzalin treatments reduced tuber yields as much as leaving weeds uncontrolled. This was probably due to competition from inadequately controlled weeds, as no obvious toxic effects were observed from these two herbicides. The second experiment evaluated thirteen herbicides applied either preor post-emergence to dahlias grown in pots both from seeds and transplanted seedlings. Of the pre-emergence treatments, alachlor, chlorpropham, chlorthal-dimethyl, pendimethalin and trifluralin did not injure either direct-sown or transplanted plants. Methabenzthiazuron did inhibit the early growth of direct sown dahlia, but plants recovered very quickly. Terbacil damaged direct sown dahlia, but not transplanted seedlings. EPTC, oxyfluorfen, oryzalin, and simazine all caused some injury to direct sown and transplanted dahlias. Of the post-emergence treatments, chlorpropham did not injure either direct sown or transplanted dahlia. Chlorthal-dimethyl, haloxyfop, and methabenzthiazuron caused some plant injury to early growth of direct-sown seedlings, but injured plants recovered quickly."</p>

804	Tolerates, or benefits from, mutilation, cultivation, or fire	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	Unknown

805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	Unknown

Summary of Risk Traits:

High Risk / Undesirable Traits

- Grows and could potentially spread in regions with tropical climates
- Other species may be weedy or invasive
- Unpalatable to deer and probably other browsing animals
- Reported to be toxic to animals
- May be toxic or cause skin irritation if handled
- Tolerates many soil types
- Tuberous herb
- Reproduces by vegetative division
- Dispersed through intentional cultivation

Low Risk Traits

- An ornamental plant of hybrid origin, with no evidence of naturalization or invasiveness where cultivated
- Unarmed (no spines, thorns, or burrs)
- Grows best in high light environments (dense shade may inhibit spread)
- Seed production may be limited or absent
- Seeds, if produced, lack evident specialized dispersal structures and fall to the ground due to gravity