

Taxon: Euphorbia bicolor Engelm. & A. Gray

Family: Euphorbiaceae

Common Name(s): snow on the prairie
snow-on-the-prairie

Synonym(s): Dichrophyllum bicolor (Engelm. & A. Gray) Klotzsch & Garcke
Euphorbia bicolor var. concolor Engelm. & A. Gray
Lepadena bicolor (Engelm. & A. Gray) Nieuwl.

Assessor: Chuck Chimera

Status: Approved

End Date: 25 Aug 2026

WRA Score: 1.0

Designation: L

Rating: Low Risk

Keywords: Annual, Unpalatable, Toxic Sap, Medicinal, Ballistic Dispersal

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)	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	n
301	Naturalized beyond native range	y = 1*multiplier (see Appendix 2), n = question 205	n
302	Garden/amenity/disturbance weed	y = 1*multiplier (see Appendix 2), n = 0	n
303	Agricultural/forestry/horticultural weed		
304	Environmental weed	y = 2*multiplier (see Appendix 2), n = 0	n
305	Congeneric weed	y = 1*multiplier (see Appendix 2), n = 0	y
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	y = 1, n = 0	y
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		

Qsn #	Question	Answer Option	Answer
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)		
411	Climbing or smothering growth habit	y = 1, n = 0	n
412	Forms dense thickets		
501	Aquatic	y = 5, n = 0	n
502	Grass	y = 1, n = 0	n
503	Nitrogen fixing woody plant	y = 1, n = 0	n
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	y = 1, n = 0	n
601	Evidence of substantial reproductive failure in native habitat	y = 1, n = 0	n
602	Produces viable seed	y = 1, n = -1	y
603	Hybridizes naturally		
604	Self-compatible or apomictic		
605	Requires specialist pollinators	y = -1, n = 0	n
606	Reproduction by vegetative fragmentation	y = 1, n = -1	n
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	1
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)		
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/m2)		
802	Evidence that a persistent propagule bank is formed (>1 yr)		
803	Well controlled by herbicides	y = -1, n = 1	y
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
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"Flowering and fruiting summer-fall. Prairies, blackland (calcareous) prairies, pastures and clearings in former blackland prairie areas, roadside clearings; 100-200 m; Ark., La., Okla., Tex."
	WRA Specialist. (2026). Personal Communication	It is a wild annual species native to the south-central United States (Arkansas, Louisiana, Oklahoma, and Texas). There is no strong evidence that it has undergone substantial domestication or selective breeding for traits such as reduced seed production, altered growth, or dependence on cultivation.
102	Has the species become naturalized where grown?	
	Source(s)	Notes
	WRA Specialist. (2026). Personal Communication	NA
103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. (2026). 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
	POWO (2026). Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet; https://powo.science.kew.org/ . [Accessed 14 Aug 2026]	"The native range of this species is Oklahoma, Texas, Arkansas, Louisiana. It is an annual and grows primarily in the subtropical biome."
202	Quality of climate match data	High
	Source(s)	Notes
	POWO (2026). Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet; https://powo.science.kew.org/ . [Accessed 14 Aug 2026]	"The native range of this species is Oklahoma, Texas, Arkansas, Louisiana. It is an annual and grows primarily in the subtropical biome."

Qsn #	Question	Answer
203	Broad climate suitability (environmental versatility)	n
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"100-200 m; Ark., La., Okla., Tex. " [Elevation range <1000 m]
	WRA Specialist. (2026). Personal Communication	Although it is suited to subtropical climates, its known native distribution is relatively restricted to the south-central United States (Arkansas, Louisiana, Oklahoma, and Texas). There is not strong evidence that it tolerates a broad range of climatic conditions spanning multiple major climate zones.

204	Native or naturalized in regions with tropical or subtropical climates	y
	Source(s)	Notes
	POWO (2026). Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet; https://powo.science.kew.org/ . [Accessed 14 Aug 2026]	"The native range of this species is Oklahoma, Texas, Arkansas, Louisiana. It is an annual and grows primarily in the subtropical biome."

205	Does the species have a history of repeated introductions outside its natural range?	n
	Source(s)	Notes
	Lady Bird Johnson Wildflower Center. (2026). <i>Euphorbia bicolor</i> . https://www.wildflower.org/plants/result.php?id_plant=eubi2 . [Accessed 14 Aug 2026]	"Conditions Comments: Although <i>E. bicolor</i> is not commercially available, it would be an excellent plant for large areas with poor soils. It adapts readily to both dry and wet climates. In the wild, <i>E. bicolor</i> can form extensive colonies over many acres, often seeming to blanket the fields with snow hence the origin of its name."
	GBIF Secretariat (2026). <i>Euphorbia bicolor</i> Engelm. & A.Gray. GBIF Backbone Taxonomy. https://www.gbif.org/taxon/3CN2V . [Accessed 14 Aug 2026]	Few records occur outside its native range
	iNaturalist. (2026). Snow-on-the-Prairie (<i>Euphorbia bicolor</i>). https://www.inaturalist.org/taxa/120585-Euphorbia-bicolor . [Accessed 14 Aug 2026]	No records outside native range

301	Naturalized beyond native range	n
	Source(s)	Notes
	GBIF Secretariat (2026). <i>Euphorbia bicolor</i> Engelm. & A.Gray. GBIF Backbone Taxonomy. https://www.gbif.org/taxon/3CN2V . [Accessed 24 Aug 2026]	Few records occur outside its native range. None indicate naturalization
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence
	Gallaher, T.J., Brock, K., Kennedy, B.H., Imada, C.T., Imada, K., & Walvoord, N. (2026). Plants of Hawai'i. http://www.plantsofhawaii.org . [Accessed 24 Aug 2026]	No evidence to date
	iNaturalist. (2026). Snow-on-the-Prairie (<i>Euphorbia bicolor</i>). https://www.inaturalist.org/taxa/120585-Euphorbia-bicolor . [Accessed 24 Aug 2026]	No records outside native range

302	Garden/amenity/disturbance weed	n
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Qsn #	Question	Answer
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"Prairies, blackland (calcareous) prairies, pastures and clearings in former blackland prairie areas, roadside clearings; 100-200 m" [Disturbance-associated, but not documented as a major garden/amenity weed]
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

303	Agricultural/forestry/horticultural weed	
	Source(s)	Notes
	Stewart, R. A. (2017). Snow on the Prairie. Ozark Green Thumb BCMG Monthly e-Newsletter. https://www.baxtercountymg.com/monthly-newsletter/snow-on-the-prairie . [Accessed 24 Aug 2026]	"A milky latex weeps from any broken stem, leaf or bract. All Euphorbias contain this milky sap, which can cause dermatitis to sensitive-skinned persons, and, is toxic. Since livestock does not eat this plant, snow-on-the-prairie is normally found in very large colonies throughout the Grand Prairie, Blackland Prairie, east to east Texas, and from Montague County southwest to Johnson County. A single plant is intriguing, but a colony is breathtaking." [Not specifically listed as a weed, but could impact ranching due to toxic properties]
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	Listed as an agricultural weed, citing Toxic Plants of Texas, a now defunct link. Could potentially impact livestock and ranching activities due to toxic properties

304	Environmental weed	n
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence
	WRA Specialist. (2026). Personal Communication	There is no strong evidence that <i>E. bicolor</i> has become an invasive or environmentally damaging species. It is native to the south-central United States, and I could not find documented cases of it invading natural ecosystems outside its native range or causing significant impacts to native vegetation.

305	Congeneric weed	y
	Source(s)	Notes
	Weber, E. (2017). Invasive Plant Species of the World, 2nd Edition: A Reference Guide to Environmental Weeds. CABI Publishing, Wallingford, UK	[<i>Euphorbia esula</i>] "Leafy spurge has become one of the worst invaders in northern America causing both ecological and economic damage."
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	Numerous Euphorbia species have become invasive weeds

401	Produces spines, thorns or burrs	n
	Source(s)	Notes

Qsn #	Question	Answer
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	[No evidence] "Herbs, annual, with taproot. Stems erect, unbranched or branched, 40-100 cm, pilose. Leaves alternate; stipules 0.3-0.4 mm; petiole 0.3-1 mm, pilose; blade narrowly elliptic to lanceolate, 37-54 × 7-17 mm, base cuneate to slightly rounded, margins entire, apex aristate or acute, surfaces pilose; venation obscure, only midvein conspicuous. Cyathia in terminal pleiochasia dichasial and pleiochasial bracts linear to narrowly oblanceolate, with conspicuous white margins; peduncle 1.2-3 mm, densely pilose. Involucre campanulate, 2.7-3.5 × 2.2-3 mm, densely pilose; glands 4-5, green to pale greenish yellow, reniform, 0.6-0.7 × 1.4-1.6 mm; appendages white, obdeltate to orbiculate, 1.4-2.5 × 1.7-3 mm, dentate to erose. Staminate flowers 30-70. Pistillate flowers: ovary pilose; styles 0.7-1.2 mm, 2-fid 1/2 length. Capsules depressed-ovoid, 3.5-7.5 × 6-8.7 mm, densely pilose; columella 4.5-5.5 mm. Seeds tan to brown, ovoid, 4.3-4.5 × 3.7-3.9 mm, alveolate; caruncle absent."

402	Allelopathic	
	Source(s)	Notes
	WRA Specialist. (2026). Personal Communication	Unknown. No evidence found

403	Parasitic	n
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	Euphorbiaceae. No evidence

404	Unpalatable to grazing animals	y
	Source(s)	Notes
	Austin College. (2026). Snow-on-the Prairie. http://artemis.austincollege.edu/acad/bio/sgoldsmith/skg_ebe/Snow_on_the_Prairie.htm . [Accessed 25 Aug 2026]	"Although SotP is a native plant, it is also an "increaser" in disturbed or overgrazed prairies and pastures. Because it is unpalatable to cattle, SotP increases in density when other plants are grazed."
	Bergman, C. M. (2017). The Vascular Flora of Lee County, Texas. <i>Lundellia</i> , 20(1), 60-114	"Euphorbia bicolor G. Engelmann & A. Gray [Snow-on-the-prairie] Locally abundant; disturbed pastureland (avoided by cattle)."
	Diggs, G. M., Jr., Lipscomb, B. L., Reed, M. D., & O'Kennon, R. J. (2006). Illustrated Flora of East Texas. Volume One: Introduction, Pteridophytes, Gymnosperms, and Monocotyledons. Botanical Research Institute of Texas, Fort Worth	"Overgrazed pastures are characterized by such species as <i>Helenium amarum</i> (bitterweed), <i>Solanum elaeagnifolium</i> (silverleaf nightshade), <i>Croton capitatus</i> (woolly croton), and <i>Euphorbia bicolor</i> (snow-on-the-prairie). Such overgrazed areas are obvious at a glance due to the huge populations of these inedible or unpalatable species. In some cases a large field can have literally hundreds of thousands or even millions of individuals of these and other toxic, spiny, or otherwise inedible species. Abusive overgrazing is an excellent example of a situation whereby the abuser of the environment (the individual responsible for the overgrazing) directly pays the price for his damage—the virtually complete loss of the grazing resource."
	Stewart, R. A (2017). Snow on the Prairie. Ozark Green Thumb BCMG Monthly e-Newsletter. https://www.baxtercountymg.com/monthly-newsletter/snow-on-the-prairie . [Accessed 24 Aug 2026]	"Since livestock does not eat this plant, snow-on-the-prairie is normally found in very large colonies throughout the Grand Prairie, Blackland Prairie, east to east Texas, and from Montague County southwest to Johnson County."

405	Toxic to animals	y
	Source(s)	Notes

Qsn #	Question	Answer
	Diggs, G. M., Jr., Lipscomb, B. L., Reed, M. D., & O'Kennon, R. J. (2006). Illustrated Flora of East Texas. Volume One: Introduction, Pteridophytes, Gymnosperms, and Monocotyledons. Botanical Research Institute of Texas, Fort Worth	"Overgrazed pastures are characterized by such species as <i>Helenium amarum</i> (bitterweed), <i>Solanum elaeagnifolium</i> (silverleaf nightshade), <i>Croton capitatus</i> (woolly croton), and <i>Euphorbia bicolor</i> (snow-on-the-prairie). Such overgrazed areas are obvious at a glance due to the huge populations of these inedible or unpalatable species. In some cases a large field can have literally hundreds of thousands or even millions of individuals of these and other toxic, spiny, or otherwise inedible species. Abusive overgrazing is an excellent example of a situation whereby the abuser of the environment (the individual responsible for the overgrazing) directly pays the price for his damage—the virtually complete loss of the grazing resource."
	Lady Bird Johnson Wildflower Center. (2026). <i>Euphorbia bicolor</i> . https://www.wildflower.org/plants/result.php?id_plant=eubi2 . [Accessed 24 Aug 2026]	"Warning: <i>Euphorbia bicolor</i> is a member of the Spurge Family which has as one of its characteristics the presence of milky white sap in the stems. The sap contains a toxic chemical euphorbium which can cause inflammation or irritation to the eyes and skin of some people. Many common ornamentals such as the poinsettia are members of this family. Honey produced by bees that have collected nectar and pollen from this species can irritate or burn the throats of consumers of it. Beekeepers call it "jalapeno honey". (Reslit: 3174). Interesting Foliage: yes Deer Resistant: High"

406	Host for recognized pests and pathogens	
	Source(s)	Notes
	Encyclopedia of Life. (2026). Snow On The Prairie <i>Euphorbia bicolor</i> Engelm. & A. Gray. https://eol.org/pages/1145257/ . [Accessed 25 Aug 2026]	"host of <i>Uromyces myristicus</i> Berk. & Broome 1874 " [<i>Uromyces myristicus</i> is a rust fungus that infects <i>Euphorbia</i> species, causing rust spots, lesions, premature leaf death, and reduced plant vigor, although severe impacts on the host are not well documented.]

407	Causes allergies or is otherwise toxic to humans	y
	Source(s)	Notes
	Stewart, R. A (2017). Snow on the Prairie. Ozark Green Thumb BCMG Monthly e-Newsletter. https://www.baxtercountymg.com/monthly-newsletter/snow-on-the-prairie . [Accessed 25 Aug 2026]	"A milky latex weeps from any broken stem, leaf or bract. All <i>Euphorbias</i> contain this milky sap, which can cause dermatitis to sensitive-skinned persons, and, is toxic."
	Lady Bird Johnson Wildflower Center. (2026). <i>Euphorbia bicolor</i> . https://www.wildflower.org/plants/result.php?id_plant=eubi2 . [Accessed 14 Aug 2026]	"Warning: <i>Euphorbia bicolor</i> is a member of the Spurge Family which has as one of its characteristics the presence of milky white sap in the stems. The sap contains a toxic chemical euphorbium which can cause inflammation or irritation to the eyes and skin of some people. Many common ornamentals such as the poinsettia are members of this family. Honey produced by bees that have collected nectar and pollen from this species can irritate or burn the throats of consumers of it. Beekeepers call it "jalapeno honey". (Reslit: 3174)."

408	Creates a fire hazard in natural ecosystems	n
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"Herbs, annual, with taproot. Stems erect, unbranched or branched, 40-100 cm, pilose." ... "Prairies, blackland (calcareous) prairies, pastures and clearings in former blackland prairie areas, roadside clearings" [There is no evidence that <i>Euphorbia bicolor</i> creates a significant fire hazard. It is a small annual herb that does not produce the substantial woody biomass, dense persistent litter, or highly flammable vegetation typically associated with plants that increase wildfire intensity or frequency.]

Qsn #	Question	Answer
409	Is a shade tolerant plant at some stage of its life cycle	
	Source(s)	Notes
	Lady Bird Johnson Wildflower Center. (2026). <i>Euphorbia bicolor</i> . https://www.wildflower.org/plants/result.php?id_plant=eubi2 . [Accessed 25 Aug 2026]	"Light Requirement: Sun , Part Shade"
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	
	Source(s)	Notes
	Lady Bird Johnson Wildflower Center. (2026). <i>Euphorbia bicolor</i> . https://www.wildflower.org/plants/result.php?id_plant=eubi2 . [Accessed 25 Aug 2026]	"Soil Description: Hard clay soils of prairies, rangelands, and edges of woods. Conditions Comments: Although <i>E. bicolor</i> is not commercially available, it would be an excellent plant for large areas with poor soils. It adapts readily to both dry and wet climates."
	Botanical Research Institute of Texas, (2026). Snow-on-the-Prairie - <i>Euphorbia bicolor</i> . https://ecoscap.es.brit.org/my_landscape/plants/201/ . [Accessed 25 Aug 2026]	"Soil moisture requirements: dry Soil content requirements: Loam Clay Caliche"
411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"Herbs, annual, with taproot. Stems erect, unbranched or branched, 40-100 cm, pilose."
412	Forms dense thickets	
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"Herbs, annual, with taproot." [An annual plant with seasonal population fluctuations]
	Lady Bird Johnson Wildflower Center. (2026). <i>Euphorbia bicolor</i> . https://www.wildflower.org/plants/result.php?id_plant=eubi2 . [Accessed 25 Aug 2026]	"In the wild, <i>E. bicolor</i> can form extensive colonies over many acres, often seeming to blanket the fields with snow hence the origin of its name." [Unknown if extensive colonies can competitively exclude other vegetation]
	Wildflowers of Texas. (2026). Snow-on-the-prairie. https://w3.biosci.utexas.edu/prc/wildflowers/flower/euphorbia-bicolor . [Accessed 25 Aug 2026]	"It is often over three feet tall, and large populations can turn a field white." [Unknown if seasonal population increases can competitively exclude other vegetation]
501	Aquatic	n
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	[Terrestrial] "Prairies, blackland (calcareous) prairies, pastures and clearings in former blackland prairie areas, roadside clearings"
502	Grass	n

Qsn #	Question	Answer
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	Euphorbiaceae
503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	Euphorbiaceae
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	n
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"Herbs, annual, with taproot. Stems erect, unbranched or branched, 40-100 cm, pilose. Leaves alternate; stipules 0.3-0.4 mm; petiole 0.3-1 mm, pilose; blade narrowly elliptic to lanceolate, 37-54 × 7-17 mm, base cuneate to slightly rounded, margins entire, apex aristate or acute, surfaces pilose; venation obscure, only midvein conspicuous. "
601	Evidence of substantial reproductive failure in native habitat	n
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"Prairies, blackland (calcareous) prairies, pastures and clearings in former blackland prairie areas, roadside clearings" [There is no evidence that Euphorbia bicolor experiences substantial reproductive failure within its native range. It is a naturally occurring annual that produces viable seeds and maintains populations across its native distribution.]
602	Produces viable seed	y
	Source(s)	Notes
	Stewart, R. A (2017). Snow on the Prairie. Ozark Green Thumb BCMG Monthly e-Newsletter. https://www.baxtercountymg.com/monthly-newsletter/snow-on-the-prairie . [Accessed 25 Aug 2026]	"As flowers mature, green, hairy, 3-seeded capsules develop and stay on the plant until they dry, harden, pop open and disperse seeds. This ballistic dispersal of seeds explains the scattered arrangement of plants on the prairie. If you plan to collect seeds from this annual, you must monitor the maturity and collect after the pod dries, but before it pops open."
	PictureThis. (2026). How to Grow and Care for Snow On The Prairie. https://www.picturethisai.com/care/Euphorbia_bicolor.html . [Accessed 25 Aug 2026]	"Famed for its striking foliage, snow On The Prairie is conducive to propagation through sowing. When propagating, attention should be paid to the seeds' viability and the use of well-draining soil to accommodate this plant's specific needs. A critical success factor is maintaining consistent moisture levels without waterlogging, which snow On The Prairie is particularly sensitive to. For optimal results, seeds should be sown in a warm, stable environment, as snow On The Prairie thrives under such conditions. "
	Austin College. (2026). Snow-on-the Prairie. http://artemis.austincollege.edu/acad/bio/sgoldsmith/skg_ebe/Snow_on_the_Prairie.htm . [Accessed 25 Aug 2026]	"It produces relatively large numbers of large seeds, and these disperse easily because the seed pods are "ballistic", shooting the seeds out several feet when the pods explode. The seeds may also be unpalatable to granivores (seed-eaters), so would suffer less seed mortality than other plants with more edible seeds. "

Qsn #	Question	Answer
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"Seeds tan to brown, ovoid, 4.3-4.5 × 3.7-3.9 mm, alveolate; caruncle absent." [Presumably viable seeds are produced]

603	Hybridizes naturally	
	Source(s)	Notes
	WRA Specialist. (2026). Personal Communication	Unknown. No evidence found

604	Self-compatible or apomictic	
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"Involucre campanulate, 2.7-3.5 × 2.2-3 mm, densely pilose; glands 4-5, green to pale greenish yellow, reniform, 0.6-0.7 × 1.4-1.6 mm; appendages white, obdeltate to orbiculate, 1.4-2.5 × 1.7-3 mm, dentate to erose. Staminate flowers 30-70. Pistillate flowers: ovary pilose; styles 0.7-1.2 mm, 2-fid 1/2 length." [While no definitive study exists, the plant's physical structure (monoecious flowers within the same cyathium) and its successful self-seeding behavior strongly indicate that <i>Euphorbia bicolor</i> is likely self-compatible.]
	Faboyede, A. O. (2015). Biosystematic studies in the genus <i>euphorbia</i> L. in Nigeria, PhD Dissertation. University of Lagos	[Unknown. Self-compatibility documented in <i>E. hyssopifolia</i> , <i>E. heterophylla</i> and <i>E. hirta</i> .] "Fruit sets were observed in all the bagged inflorescences. These were taken as indication of self compatibility. The seeds were allowed to dry and planted inside petri- dishes lined with cotton wool pre- soaked in distilled water. This was done to determine the viability of the seeds. Germination was observed in all the petri- dishes."

605	Requires specialist pollinators	n
	Source(s)	Notes
	Kubitzki, K. (ed.). (2014). The Families and Genera of Vascular Plants. Vol. XI. Flowering Plants. Eudicots: Malpighiales. Springer, New York	"Euphorbs with fully pseudanthial inflorescences have either "normal" unisexual flowers (<i>Dalechampia</i> , <i>Pera</i>) or highly reduced unisexual flowers united in a cyathium (<i>Euphorbia</i> and relatives in <i>Euphorbieae</i>). In the latter case the staminate flowers are reduced to a single stamen and the pistillate flowers to a single pistil, with perianth absent in both cases. In both situations, pollinators visit the clusters of flowers as if they were a single flowerhence, application of the term pseudanthium (false flower) or blossom. Pollination of euphorbs with pseudanthial inflorescences is often highly generalized."
	Encyclopedia of Life. (2026). Snow On The Prairie <i>Euphorbia bicolor</i> Engelm. & A. Gray. https://eol.org/pages/1145257/ . [Accessed 25 Aug 2026]	"flowers visited by <i>Palpada vinetorum</i> (Fabricius 1799) (Northern Plushback Fly) "
	Zomlefer, W.B. (1994). Guide to Flowering Plant Families. The University of North Carolina Press, Chapel Hill & London	"Most euphorbs easily attract pollinators (mostly flies) with the nectar secreted by the extrastaminal disc or glands"
	Austin College. (2026). Snow-on-the Prairie. http://artemis.austincollege.edu/acad/bio/sgoldsmith/skg_ebe/Snow_on_the_Prairie.htm . [Accessed 25 Aug 2026]	"SotP is a native plant in north Texas prairies and pastures. It flowers in late summer and early fall; the flowers are small and pale but are "subtended" by showy "bracts" (to use botanical terminology). Bracts are leaves that are modified to attract insect pollinators to flowers when the flowers themselves are not showy."

606	Reproduction by vegetative fragmentation	n
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Qsn #	Question	Answer
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"Herbs, annual, with taproot." [Euphorbia bicolor is an annual plant with a taproot that reproduces by seed. There is no evidence that it uses vegetative fragmentation as a method of reproduction in the wild.]
607	Minimum generative time (years)	1
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"Herbs, annual, with taproot."
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"Prairies, blackland (calcareous) prairies, pastures and clearings in former blackland prairie areas, roadside clearings" [Potentially. Occurs in roadsides and disturbed areas, creating opportunities for inadvertent human-mediated movement of seeds.]
702	Propagules dispersed intentionally by people	y
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	"Major Pathway/s: Herbal"
	WRA Specialist. (2026). Personal Communication	Euphorbia bicolor is intentionally planted by people as an ornamental garden plant.
703	Propagules likely to disperse as a produce contaminant	n
	Source(s)	Notes
	WRA Specialist. (2026). Personal Communication	Euphorbia bicolor is not currently recognized as a produce contaminant. Its large seeds and unpalatable nature mean that the risk of it contaminating harvested crops is very low, and there is no evidence to suggest it is an agricultural problem.
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence
704	Propagules adapted to wind dispersal	n
	Source(s)	Notes
	Austin College. (2026). Snow-on-the Prairie. http://artemis.austincollege.edu/acad/bio/sgoldsmith/skg_ebe/Snow_on_the_Prairie.htm . [Accessed 25 Aug 2026]	" It produces relatively large numbers of large seeds, and these disperse easily because the seed pods are "ballistic", shooting the seeds out several feet when the pods explode. The seeds may also be unpalatable to granivores (seed-eaters), so would suffer less seed mortality than other plants with more edible seeds. "
	WRA Specialist. (2026). Personal Communication	Seeds are explosively/ballistically dispersed and lack adaptations for wind dispersal.
705	Propagules water dispersed	n

Qsn #	Question	Answer
	Source(s)	Notes
	Kubitzki, K. (ed.). (2014). The Families and Genera of Vascular Plants. Vol. XI. Flowering Plants. Eudicots: Malpighiales. Springer, New York	"The typical Euphorbiaceous fruit (upon drying) dehisces explosively into three 1- or 2-seeded merocarps (cocci)." [Genus description]
	WRA Specialist. (2026). Personal Communication	There is no evidence that <i>E. bicolor</i> has adaptations for hydrochory or that water is a significant dispersal mechanism. Its seeds are released from dehiscent capsules by explosive/ballistic dispersal, and the seeds lack obvious adaptations for floating or prolonged transport by water.

706	Propagules bird dispersed	n
	Source(s)	Notes
	Austin College. (2026). Snow-on-the Prairie. http://artemis.austincollege.edu/acad/bio/sgoldsmith/skg_ebe/Snow_on_the_Prairie.htm . [Accessed 25 Aug 2026]	"The seeds may also be unpalatable to granivores (seed-eaters), so would suffer less seed mortality than other plants with more edible seeds."
	Kubitzki, K. (ed.). (2014). The Families and Genera of Vascular Plants. Vol. XI. Flowering Plants. Eudicots: Malpighiales. Springer, New York	"The typical Euphorbiaceous fruit (upon drying) dehisces explosively into three 1- or 2-seeded merocarps (cocci)." [Genus description. Its seeds are released from dehiscent capsules by ballistic (explosive) dispersal, rather than being contained in fleshy fruits or other structures typically adapted for bird dispersal.]

707	Propagules dispersed by other animals (externally)	n
	Source(s)	Notes
	Flora of North America Editorial Committee. (2016). Flora of North America North of Mexico. Volume 12. Magnoliophyta: Vitaceae to Garryaceae. Oxford University Press, New York and Oxford	"Seeds tan to brown, ovoid, 4.3-4.5 × 3.7-3.9 mm, alveolate; caruncle absent." [There is no good evidence that the seeds are adapted for external animal dispersal (epizoochory). The seeds are relatively smooth and lack obvious hooks, spines, burrs, or other structures that would allow them to attach to animal fur or feathers.]
	Kubitzki, K. (ed.). (2014). The Families and Genera of Vascular Plants. Vol. XI. Flowering Plants. Eudicots: Malpighiales. Springer, New York	"The typical Euphorbiaceous fruit (upon drying) dehisces explosively into three 1- or 2-seeded merocarps (cocci)." [Genus description]

708	Propagules survive passage through the gut	n
	Source(s)	Notes
	Austin College. (2026). Snow-on-the Prairie. http://artemis.austincollege.edu/acad/bio/sgoldsmith/skg_ebe/Snow_on_the_Prairie.htm . [Accessed 25 Aug 2026]	"It produces relatively large numbers of large seeds, and these disperse easily because the seed pods are "ballistic", shooting the seeds out several feet when the pods explode. The seeds may also be unpalatable to granivores (seed-eaters), so would suffer less seed mortality than other plants with more edible seeds."
	Kubitzki, K. (ed.). (2014). The Families and Genera of Vascular Plants. Vol. XI. Flowering Plants. Eudicots: Malpighiales. Springer, New York	"The typical Euphorbiaceous fruit (upon drying) dehisces explosively into three 1- or 2-seeded merocarps (cocci)." [Genus description. No evidence of consumption or internal dispersal]

801	Prolific seed production (>1000/m2)	
	Source(s)	Notes
	Austin College. (2026). Snow-on-the Prairie. http://artemis.austincollege.edu/acad/bio/sgoldsmith/skg_ebe/Snow_on_the_Prairie.htm . [Accessed 25 Aug 2026]	[Potentially. Densities unknown] "It produces relatively large numbers of large seeds, and these disperse easily because the seed pods are "ballistic", shooting the seeds out several feet when the pods explode. The seeds may also be unpalatable to granivores (seed-eaters), so would suffer less seed mortality than other plants with more edible seeds."

Qsn #	Question	Answer
	WRA Specialist. (2026). Personal Communication	While quantitative data on seeds per square meter are unavailable, <i>Euphorbia bicolor</i> is considered a prolific seed producer based on its ability to form extensive colonies, though no specific density thresholds have been documented in the scientific literature.

802	Evidence that a persistent propagule bank is formed (>1 yr)	
	Source(s)	Notes
	WRA Specialist. (2026). Personal Communication	Unknown.

803	Well controlled by herbicides	y
	Source(s)	Notes
	Plants of Texas Rangelands. (2026). Snow-on-the-Mountain. https://rangeplants.tamu.edu/plant/snow-on-the-mountain-snow-on-the-prairie/ . [Accessed]	"Although most broadleaf herbicides control the plant easily, it is generally uneconomical to control as a primary target species." [For the closely related species <i>Euphorbia marginata</i>]
	WRA Specialist. (2026). Personal Communication	<i>Euphorbia bicolor</i> is a small, annual, broadleaf herb, and extension/land-management sources recommend broadleaf herbicides for controlling annual <i>Euphorbia</i> (spurge) species in rangeland and pasture settings. Its annual life cycle and lack of specialized underground storage organs also make it relatively susceptible to foliar herbicide treatments.

804	Tolerates, or benefits from, mutilation, cultivation, or fire	
	Source(s)	Notes
	WRA Specialist. (2026). Personal Communication	Unknown. While <i>Euphorbia bicolor</i> is well-adapted to the disturbed environments where it grows, there is no specific evidence that it tolerates or benefits from the direct actions of mutilation, cultivation, or fire. Its status as an annual with a taproot suggests it is unlikely to recover from severe physical damage. However, its presence in prairies, pastures, and roadsides indicates it is a disturbance-adapted species that can thrive in the openings created by such events.

805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	WRA Specialist. (2026). Personal Communication	Unknown

Summary of Risk Traits:

High-Risk Traits

- Unpalatable to livestock, increases in overgrazed pastures
- Toxic sap causes dermatitis and is poisonous to animals and humans
- Produces viable seed with explosive (ballistic) dispersal
- Tolerates poor, dry soils (clay, caliche, limestone, sand)
- Forms extensive colonies in disturbed areas
- Congeneric species include serious weeds (e.g., *E. esula*)

Low-Risk Traits

- Annual; no long-lived perennial structures
- No vegetative reproduction (taproot only)
- No persistent seed bank (>1 yr) confirmed
- No wind, water, or external animal dispersal adaptations
- No bird dispersal or gut-survival evidence
- Not a produce contaminant
- Not naturalized outside native range
- Not a major environmental weed
- Susceptible to broadleaf herbicides

Second Screening Results for Herbs or Low Stature Shrubby Life Forms

(A) Reported as a weed of cultivated lands? No

Outcome = Accept (Low Risk)