



Absinth Wormwood Control

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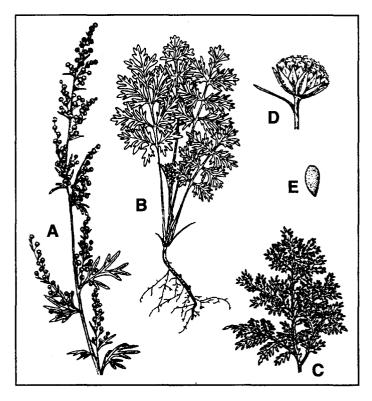
Absinth wormwood (Artemisia absinthium L.) is a perennial forb which is easily recognized by its strong sage odor. The plant also is known as American or common wormwood, mugwort or madderwort, and wormwood sage. It is grown in herb gardens for the sage flavor of the leaves. The young flower heads are the source of aromatic oil used to prepare vermouth and absinth. The oil of absinth wormwood is also an active ingredient in antiseptic liniments. Absinth wormwood is an escaped ornamental introduced from Europe and has spread rapidly in the pasture and rangeland of North Dakota, especially in dry years. The plant causes economic losses by reducing available forage, tainting the milk of cattle that graze it. and medically as a pollen source for allergies and asthma. Absinth wormwood is a prolific seed producer but also can spread by short roots. The plant is most often found on dry soils, in overgrazed pasture and rangeland, wastelands, and roadsides.

Identification

Absinth wormwood is a perennial fragrant forb or herb. It commonly is 3 feet tall at maturity but can grow over 5 feet tall (figure). The plant is woody at the base and regrows from the soil level each spring. Leaves are light to olive green in color, 2 to 5 inches long, and divided two or three times into deeply lobed leaflets. Leaves and stems are covered with fine silky hairs that give the plant a grayish appearance. Absinth wormwood is a member of the composite family. Flower stalks appear at each upper leaf node and produce numerous flower heads 1/8 inch in diameter, which appear from late-July through mid-August in North Dakota. Many small, inconspicuous yellow flowers are produced in each head. Each fruit contains one seed which is less than 1/16 inch long, smooth, flattened, and light gray-brown in color. These small seeds are scattered easily by wind, water, animals, and in hay.

744.3 N9 A8 10.838 MUJANUARY 2004





Absinth wormwood. A. upper part of the stem with flowers; B. leaf stem early in the growing season; C. lower leaf covered with fine gray hairs; D. flower head; and E. seed.

Control

Absinth wormwood can be controlled much easier and more economically than most perennial weeds. Herbicides commonly used to control absinth wormwood include Tordon (picloram), products that contain clopyralid (Stinger, Transline, Curtail, or Redeem), dicamba (various), 2,4-D, glyphosate (Roundup and equivalent), and Landmaster (glyphosate plus 2,4-D). These herbicides should be applied when the plant is at least 12 inches tall and actively growing. Herbicides applied from late-June until mid-August have given better residual control the following growing season than either spring or fall treatments. If a fall treatment is desired, the plants should be mowed in early- to mid-summer to promote active regrowth.

Tordon

Tordon (picloram) generally provides the most rapid and complete control of absinth wormwood of the available herbicides and is effective at comparatively low rates (table). Tordon can be used in pastures, rangeland, and noncropland only. Absinth wormwood control with Tordon is less dependent on time of application than with dicamba or 2,4-D. Tordon at 0.5 to 1 pint per acre (0.13 to 0.25 pounds per acre) will give 90 to 100 percent control. Tordon should be applied at 1 pint per acre to control older plants and very dense absinth wormwood infestations. Consult the label for grazing restrictions as restrictions vary with Tordon rate and use of the treated forage.

Average absinth wormwood control from seven experiments at five locations in North Dakota.

		Months after treatment		
Treatment	Rate	3	12	15
	pints/A	% control		
Dicamba	1	20	70	75
Dicamba	2	60	90	100
2,4-D	2	15	75	75
2,4-D	4	50	85	95
Tordon (picloram)	0.5	35	90	100
Tordon (picloram)	0.75	60	100	100
Tordon (picloram)	1	90	100	100
Stinger or Transline (clopyralid)	0.5	50	90	90
Stinger or Transline (clopyralid)	0.67	75	100	95
Curtail (clopyralid + 2,4-D)	2.5	75	95	95
Curtail (clopyralid + 2,4-D)	4	85	100	95
Curtail (clopyralid + 2,4-D)	5	85	100	90

Products that contain clopyralid

Curtail (clopyralid plus 2,4-D) will provide 85 to 100 percent control of absinth wormwood (table). Curtail should be applied at 2 pints per acre if absinth wormwood is a problem in wheat or barley. Curtail can be applied at up to 4 pints per acre for absinth wormwood control in fallow. When clopyralid is used in cropland, do not rotate to any crop except small grains, grass, corn, or sugarbeet within one year of application. Redeem (clopyralid plus triclopyr) is a less costly alternative to Curtail for absinth wormwood control in pasture, rangeland, and non-cropland. Redeem should be applied at 1.5 to 2 pints per acre. Haying or grazing by lactating animals must be delayed for 14 days after clopyralid application. Stinger or Transline (clopyralid) do not contain other herbicides like Curtail and Redeem do, thus can be used where a narrower weed control spectrum is desired. However, Stinger and Transline are more expensive than the equivalent clopyralid rate found in Curtail and Redeem.

Dicamba (various)

Dicamba (various) liquid at 1 to 2 pints per acre (0.5 to 1.0 pounds per acre) will give 75 to 100 percent control of absinth wormwood 12 to 15 months after application (table). The higher rate should be used in dense or well established stands. The plants die slowly, so control of large plants may not be observed until the next growing season. A surfactant at 0.5 percent (v/v) should be added to improve control of large plants. Dicamba can be used to control absinth wormwood in fallow

land or post-harvest cropland. Consult the label for crop rotation restrictions. No waiting period between treatment and grazing by nonlactating animals is required, but the label should be consulted for grazing restrictions for lactating dairy animals and all animals prior to slaughter.

2,4-D

Treatment of absinth wormwood with 2,4-D is generally less effective than with dicamba or Tordon (picloram) (table), but 2,4-D at 1 to 2 quarts per acre of a 4-pound-per-gallon concentrate (1 to 2 pounds per acre) will give 75 to 95 percent absinth wormwood control 12 to 15 months after application. 2,4-D can be used in pastures, rangeland, non-cropland and near trees. Plants die slowly after treatment with 2,4-D, similar to dicamba. Dairy cattle should not be allowed to graze in a treated area for seven days.

Glyphosate

Glyphosate (sold as Roundup and many other tradenames) can be used to control absinth wormwood near trees and in cropland. Glyphosate at 0.25 to 1 pound per acre (0.33 to 1.33 quarts of a 3-pound-per-gallon concentrate) will control absinth wormwood, but 2,4-D must be applied the following year to control seedlings. Glyphosate is non-selective so care must be taken to avoid spraying desirable plants or tree foliage. Use a nonionic surfactant at 0.5 to 2 percent (v/v). Plants should be treated at least one week prior to tillage or mowing.

Landmaster BW (glyphosate plus 2,4-D) at 3.4 pints per acre (0.4 plus 0.6 pounds per acre) can be used to control absinth wormwood in non-cropland and pasture. Some grass injury and stunting may occur. Grass injury is greater from late-June compared to mid-August treatments. Grass should not be grazed for eight weeks after treatment.

Absinth wormwood control generally declines rapidly 24 months after treatment regardless of the initial herbinide applied. The decline generally is from reinfestation by seedlings and not regrowth from plants originally treated. Seedlings can be controlled inexpensively with 2,4-D at 0.5 to 1 pint of a 4-pound-per-gallon concentrate (0.25 to 0.5 pounds per acre).

Absinth wormwood can be effectively and economically controlled and should not be a problem in North Dakota.

Photographs of absinth wormwood and other invasive weeds can be found at: www.ag.ndsu.nodak.edu/invasiveweeds

For more information on this and other topics, see: www.ag.ndsu.nodak.edu

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