

Absinth Wormwood Control

W-838 (Revised), April 1995

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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 in preparation of 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.

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



Control

Control of absinth wormwood is much easier and more economical than for most perennial weeds. Herbicides commonly used to control absinth wormwood include clopyralid (Stinger or Curtail), dicamba (Banvel), 2,4-D, picloram (Tordon) and glyphosate (Roundup). 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. The plants should be mowed in early to mid summer to promote active regrowth prior to a fall treatment.

Picloram

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

Clopyralid

Clopyralid applied with 2,4-D (commercial mixture Curtail) will provide 85 to 100 percent control of absinth wormwood. Clopyralid should be applied at 0.09 pounds per acre (2 pints per acre Curtail) if absinth wormwood is a problem in wheat or barley crops. The clopyralid rate can be increased to 0.19 pounds per acre (4 pints per acre Curtail) 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. The clopyralid application rate should be increased to 0.18 to 0.36 pounds per acre (4 to 8 pints per acre Curtail) to control absinth wormwood in pasture rangeland and non-cropland. Do not apply Curtail to new seedings of grass. Do not cut hay for 30 days after treatment. Consult the label for grazing restrictions. The commercial mixture of clopyralid plus 2,4-D (Curtail) is more economical to use than a tank-mix of clopyralid (Stinger) plus 2,4-D and provides better control than clopyralid (Stinger) applied alone (see table).

Dicamba

Dicamba, (Banvel) liquid at 0.5 to 1.0 pounds per acre (1 to 2 pints) 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 (Banvel) or picloram (Tordon) (table), but 2,4-D at 1.0 to 2.0 pounds per acre (1 to 2 quarts of a 4-pound-per-gallon concentrate) 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 (Roundup, also several other tradenames) can be used to control absinth wormwood near trees and in cropland. Glyphosate at 0.25 to 1.0 pounds 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.

Glyphosate plus 2,4-D (Landmaster BW) at 0.4 plus 0.6 pounds per acre (3.4 pints per acre) can be used to control absinth wormwood in noncropland 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 herbicide 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 0.25 to 0.5 pounds per acre (0.5 to 1 pint of a 4-pound-per-gallon concentrate).

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

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

Herbicide	Rate (lb/A)	Months after treatment		
		3	12	15
		----- % control -----		
Dicamba (Banvel)	0.5	20	70	75
Dicamba (Banvel)	1.0	60	90	100
2,4-D	1.0	15	75	75
2,4-D	2.0	50	85	95
Picloram (Tordon 22K)	0.13	35	90	100
Picloram (Tordon 22K)	0.19	60	100	100
Picloram (Tordon 22K)	0.25	90	100	100
Clopyralid	0.19	50	90	90
Clopyralid	0.25	75	100	95
Clopyralid + 2,4-D	0.13 + 0.5	75	95	95
Clopyralid + 2,4-D	0.19 + 0.75	85	100	95
Clopyralid + 2,4-D	0.25 + 1.0	85	100	90

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