Lawn and Turfgrass Weeds: Hairy Bittercress

Hairy bittercress (Cardamine hirsuta L.) is one of the first broadleaf weeds to appear in home lawns, parks, and other turf areas during early spring.

Pinnately compound leaves with rounded leaflets. Photo: Peter Landschoot, Penn State

It grows well in moist soils, full sun, as well as in shady areas of lawns, and is often found near ornamental beds, vegetable gardens, and paved areas. This weed is very noticeable in early spring during its peak flowering period; however, it becomes less conspicuous after stems are removed by mowing and as turfgrass growth rate increases in late spring.

Life cycle

A member of the mustard family (Cruciferae), hairy bittercress can function as a winter annual, summer annual, or biennial. Seedlings often emerge following germination in fall and plants can overwinter in a vegetative state. Hairy bittercress typically flowers and produces seed during early spring.

Identification

Vegetative features include a rosette of pinnately compound leaves with rounded leaflets at the base of the plant and one or more stem leaves with elongated leaflets. Stems are erect and branching, usually 3 to 10 inches tall, with small ($1/4 - 1/2$ inch) white flowers containing four stamens at the tips of stem branches. After flower petals drop, $3/4$ to 1 inch long narrow pods form and abruptly dehisce, launching seeds up to several feet from the pod.

Left: Hairy bittercress plant with a rosette of basal leaves, flower stem with stem leaf, flower and seed pods. Center: Hairy bittercress stems with flowers and seed pods. Right: Hairy bittercress stems with multiple seed pods produced after flowering. Photos: Peter Landschoot, Penn State

Management and control

Hairy bittercress infestations can be reduced by frequent mowing in early spring to remove flower stems, increasing turf density through proper fertilization practices, and selection of turfgrasses that are well-adapted to site conditions. This weed can be controlled with various preemergence and postemergence herbicides. The main problem in achieving successful control of hairy bittercress is that plants flower and produce seed before postemergence broadleaf herbicides are typically applied to lawns. If using preemergence herbicides to control hairy bittercress, applications should commence in late summer or early fall. Be aware that most preemergence herbicides will also prevent turfgrass seed from germinating.

Preemergence herbicide products labeled for control of hairy bittercress.

Active ingredients	Product name(s)*
dimethenamid	Tower
dithiopyr	Dimension 2EW; Dithiopyr 40WSB
sulfentrazone and prodiamine	Echelon 4SC
isoxaben	Gallery 75DF

*Follow label precautionary statements, restrictions, and directions regarding tolerant turfgrass species, rates, and timing of applications.

Postemergence herbicide products labeled for control of hairy bittercress.

Active ingredients	Product name(s)*
2,4-D, clopyralid, and dicamba	Millennium Ultra**
2,4-D, fluroxypyr, and dicamba	Escalade 2
2,4-D, fluroxypyr, triclopyr, and flumioxazin	Sure Power
2,4-D, MCPP, dicamba	Trimec Classic
2,4-D, MCPP, dicamba, and carfentrazone-ethyl	SpeedZone
2,4-D, quinclorac, and dicamba	Quincept; 2DQ Herbicide
2,4-D, triclopyr, and fluroxypyr	Momentum FX2
amicarbizone	Xonerate
carfentrazone-ethyl and quinclorac	SquareOne
MCPA, fluroxypyr, and dicamba	Change Up
MCPA, fluroxypyr, and triclopyr	Battleship III
MCPA, MCPP, dicamba, and carfentrazone-ethyl	PowerZone
sulfentrazone	Surepyc
sulfentrazone	Dismiss Turf Herbicide
sulfentrazone and carfentrazone-ethyl	Dismiss NXT
sulfentrazone and quinclorac	Solitare

*Follow label precautionary statements, restrictions, and directions regarding tolerant turfgrass species, rates, and timing of applications.

**Clopyralid-containing products should not be used on residential lawns but can be used for treating weeds in non-residential turf.

References

Uva, R.H., J.C. Neal, and J.M. DiThomaso. 1997. Weeds of the Northeast. Cornell Univ. Press. 397 pp.

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