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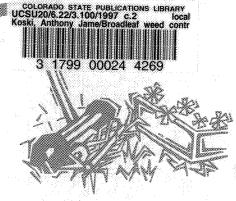
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Broadleaf weed control in lawns

no. 3.100

bv A.J. Koski [†]



Quick Facts...

To aid in the production of a healthy lawn, the homeowner should plant the best-adapted turfgrass species and use accepted turf management practices.

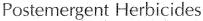
A totally weed-free lawn is rarely attainable, even with the use of herbicides.

Indiscriminate use of herbicides can cause problems for trees and other landscape plants, is expensive in time and money, and may actually reduce the vigor of the lawn.

Postemergent herbicides can be used to control existing broadleaf weeds such as dandelion, clover, thistle, and bindweed.

The development and maintenance of a dense, healthy stand of grass is the best way to reduce the occurrence of broadleaf weeds in home lawns. To aid in the production of a healthy lawn, the homeowner should plant the best-adapted turfgrass species and use accepted turf management practices (see Fact Sheet 7.202, Lawn care). Even with proper management, however, even the best-cared-for lawns can be invaded by troublesome broadleaf weeds. The homeowner may have to resort to the careful and selective use of broadleaf weed control herbicides. A totally weed-free lawn is rarely attainable, even with the use of herbicides. It is better to maintain a healthy

lawn and tolerate a few weeds rather than to make many applications of herbicides in an attempt to eliminate all weeds. Indiscriminate use of herbicides can cause problems for trees and other landscape plants, is expensive in time and money, and may actually reduce the vigor of the lawn.



Postemergent herbicides can be used to control existing broadleaf (i.e., non-grassy) weeds such as dandelion, clover, thistle, and bindweed; postemergent herbicides do not prevent weed seeds from germinating and reinfesting a lawn. Even after the successful use of a broadleaf herbicide, it is essential to use sensible cultural practices (proper fertilization, mowing, and irrigation) to encourage rapid fill-in of the turf, since new weeds will quickly reinfest the bare soil left open by the recently killed weeds. For this reason, use herbicide only as one tool in the total weed control program.

Which Herbicide Do I Use?

Before using a postemergent herbicide for broadleaf weed control, identify the weed(s) you want to control. Not all weed species are easily controlled by the same herbicides, and you may need to use a combination of two or more herbicides to obtain the desired control of specific weeds. If you can not identify the weed(s) in question, seek help from Colorado State University Cooperative Extension agents or master gardeners at your Cooperative Extension county office, from garden center personnel, or other people knowledgeable about turfgrass weeds.



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The most readily available chemicals to homeowners for selective, postemergent control of broadleaf weeds include: 2,4-D, 2,4-DP, MCPP, MCPA, and dicamba.

Weeds must be actively growing when the herbicides are applied so effective control can be achieved.

The most readily available chemicals to homeowners for selective, postemergent control of broadleaf weeds include: 2,4-D, 2,4-DP, MCPP, MCPA, and dicamba. These chemicals are available alone and in various combinations with each other. Combination products are recommended for difficult-tocontrol weeds or when a variety of weed species is present in the lawn. All are available in liquid formulations (sprayable) and often in granular formulations (generally with a fertilizer) that can be applied with a drop or broadcast spreader.

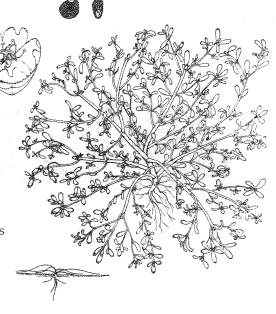


Figure 1: Purslane.

All of the chemicals listed above are safe for use on Kentucky bluegrass, perennial ryegrass, tall fescue, and fine fescue lawns **if the directions on the label are followed**. Buffalograss and blue grama lawns that have greened up can be discolored or injured by summer applications of products containing 2,4-D, MCPP, MCPA, or dicamba; applications to dormant buffalograss and bluegrama lawns in the spring or fall are safer, as long as directions are closely followed.

When Do I Apply?

Applications of herbicides intended for postemergent broadleaf weed control will only kill those weeds present at the time that the herbicide is applied. They do not prevent weed seeds from germinating and developing in the lawn at a later date. It also is important to remember that weeds must be actively growing when the herbicides are applied so effective control can be achieved. This means that you should make spring applications from mid-April through early June and fall applications during the months of September and October. Herbicide applications during July and August are strongly discouraged because weed control is often poor and there is an increased risk of causing damage/discoloration to the lawn, as well as trees, shrubs, flowers, and vegetable plants.

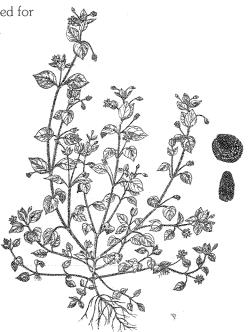


Figure 2: Common Chickweed.

How Do I Apply?

Liquid and granular formulations of herbicides can be equally effective if they are used properly. Do not apply either if rain is expected within 24 hours of application. For best results, do not mow the turf or water for at least 24 hours following application of either granular or liquid products. Granular herbicides are

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Tree roots can absorb large amounts of herbicides, so be careful applying any herbicide within a tree's root zone that extends far beyond the tree's "drip line."

the most effective if applied to grass that is moist (from morning dew, rainfall, or irrigation) because the granules adhere to the wet surfaces of the weeds. Granular applications of postemergent products to dry turf generally control very few weeds. Exercise care when applying herbicides near trees, shrubs, flower beds, and vegetable gardens. Drift from spray applications or misdirected application of granular products can damage or kill these plants. Tree roots can absorb large amounts of herbicides, so be careful applying any herbicide within a tree's root zone that extends far beyond the

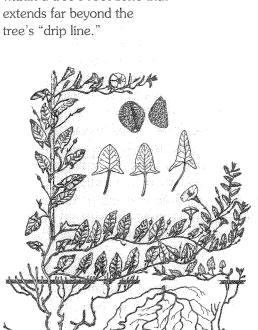


Figure 4: Field Bindweed.



Figure 3: Dandelion.

In a mature, older landscape, roots of trees and shrubs often occur throughout the entire lawn area. Do not make more than two herbicide applications per growing season on lawns with trees growing in them, and two are probably unnecessary for most lawns. Specifically, dicamba may accumulate in the soil with frequent or extensive use and may result in damage to trees, shrubs, or other ornamentals.

Table 1: Common broadleaf weeds and suggested herbicide control.

*	Α		annual,	В	ones.	biennial,	Р		perennial
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^{**} Key to broadleaf herbides:

Weed Species	Life Cycle*	Herbicide**	Application Timing	Expected Control	
Bindweed	Р	4,5,6,7	spring and fall	fair to good	
Black Medic	A,B	3,4,5,6,7	early spring, fall	fair to good	
Common Chickweed	Α	2,3,4,5,7	fall, early spring	good	
Dandelion	Р	1,3,4,5,7	spring or fall	good	
Curly Dock	P	1,3,4,5,7	spring or fall	good	
Ground Ivy	Р	3,4,5,6,7	spring, fall	fair to good	
Knotweed	Α	1,3,4,5,6,7	early spring, summer	fair to good	
Mallow	A,B	4,5,6,7	spring, fall	fair	
Plantain	Р	1,3,4,5,7	spring, fall	good	
Purslane	A ^c	1,3,4,5,7	early summer	fair to good	
Speedwells	A,P	4,5,7	spring, fall	fair to good	
Spurge	Α	4,5,6,7	summer	poor to fair	
Thistles	Р	1,3,4,5,6,7	spring, fall	fair to good	
White Clover	P	2,3,4,5,7	spring, fall	good	
Wild Violet	. P	4,5,7	spring, fall	poor	
Wood Sorrel (Oxalis)	A,P	4,5,6,7	spring, fall	fair	
Yarrow	Р	4,5,6,7	spring, fall	fair	

Exclusion of chemicals or product trade names does not imply criticism, nor does inclusion imply any endorsement, by Colorado State University or the author. READ ALL LABEL DIRECTIONS BEFORE USING ANY PESTICIDE.

¹A.J. Koski, Colorado State University Cooperative Extension turfgrass specialist and associate professor, horticulture and landscape architecture. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Milan A. Rewerts, director of Cooperative Extension, Colorado State University, Fort Collins, Colorado. Cooperative Extension programs are available to all without discrimination. No endorsement of products named is intended nor is criticism implied of products not mentioned.

^{1 = 2,4-}D

^{2 =} MCPP or MCPA

^{3 = 2,4-}D plus MCPP/MCPA

^{4 = 2,4-}D plus dichlorprop (Weedone)

^{5 = 2,4-}D plus triclopyr (Turflon)

^{6 =} dicamba or products containing dicamba (Trimec or similar).

^{7 =} triclopyr plus clopyralid (Confront)