Weed Control in Grass-Based Horse Pastures

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Pasture weed control is a challenge for most horse owners. Considerable grass pasture acreage in the Midwest is infested with broadleaf and grassy weeds. Weeds are generally less palatable, less nutritious, less dependable and lower yielding than recommended species. The first step to good weed control is correct identification of the weed and an understanding of its lifecycle. There are three types of weeds: annuals, biennials and perennials. Annuals complete their life cycle in one growing season. Biennials complete their life cycle in two growing seasons. Perennials normally live for three or more years.

For annuals, mechanical weed control, such as mowing, is an effective method of control if done prior to flowering and seed production.


Absinth Wormwood

Using herbicides to control annual weeds is most effective when applied in the spring to actively growing, small weeds. For biennials, mowing is not an option in the first year of growth because the rosettes are too close to the ground. Mowing is an effective control method in the second year as long as the mowing is complete before seed production. Chemical control of biennials is most effective when applied during the first year's growth. If treatment is delayed until the second year, an early season application of a herbicide before the flowers bloom is recommended.

Management of perennial weeds requires integrating mechanical (i.e., mowing), chemical (i.e., herbicides) and cultural (i.e., over-seeding) weed control methods. Mowing alone may take several growing seasons to effectively control perennial weeds and may never result in complete control. Herbicides alone, or a single herbicide application, likely will not eradicate perennial weeds. Fall herbicide applications (i.e., August 15 to September 15) provide the most effective perennial weed control. Application of herbicides in the spring, or mowing during the summer, can be effective in controlling growth until fall. Apply herbicides selectively, carefully and only if necessary. Always read and follow the herbicide label and comply with all grazing restrictions. Herbicides labeled for use in pastures are not harmful to horses when applied at recommended usage rates and when directions are carefully followed.


Bull Thistle

Table 1 shows herbicide control recommendations for some common broadleaf weeds in grass pastures. The key to weed management is to prevent its establishment with good pasture management. Recommended pasture management includes avoiding overgrazing, testing soil pH and fertility every three years, fertilizing (if needed) and resting the pasture 30 days after each grazing. Mowing, dragging and chemical weed control (if needed) should be done during the rest period. A well managed pasture will out-compete most weed species and will reduce weed infestations. Once weeds are established, effective control requires a combination of mechanical, chemical and cultural methods.

For a mixed pasture of legumes and grasses, no herbicides are available that will selectively control broadleaf weeds while not injuring or killing the legumes. Good pasture management should be used to control weeds in a mixed pasture.

Table 1. *Select herbicide control recommendations for some common broadleaf weeds in grass pastures and grazing and harvest restrictions. G=Good, F=Fair, P=Poor Control, N=No Control, --Indicates no data available*

	2,4-D/MCPA	Dicamba (Banvel)	Clopyralid+2,4-D[1] (Curtail)	Aminopyralid[1] (Milestone)
Absinth Wormwood	F	G	F	G
Annual Mustards[2]	G	P	G	--
Biennial Thistles[3]	F	F	G	G
Canada Thistle	F	F	G	G
Dandelion	G	G	G	P
Milkweed	F	F	F	P
Sowthistle	F	G	F	--
White Cockle	F	F	--	F
Grazing Restriction[4]	0-7 days	0 days	0 days	0 days
Harvest Restriction[4]	30 days	0 days	7 days	0 days

[1]See label restrictions on manure applications from livestock fed herbicide treated forage and for mulch or compost applied to sensitive crops; [2]wild mustard, shepard's purse; [3]bull, musk, plumeless thistle; [4]days before grazing/harvesting for hay after application. Even if label lists no grazing restrictions for horses, 7 days of restricted grazing/harvesting after application can be an additional precaution.


Canada Thistle


Milkweed