



Ornamental Weed Control

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Rising labor costs and increased use of ornamentals in commercial and residential landscapes are causing an increase in use of both preemergence and postemergence herbicides in landscape maintenance.

The landscape manager has to control weeds around a variety of desirable plant material, including deciduous and evergreen shrubs, trees, groundcovers, annual and perennial flowers, bulbs, and ornamental grasses. These plants are located in a wide variety of locations, such as plant beds, containers, greenhouses, atria, and even in sand traps.

Attention to the label is especially important in ornamental weed control due to the varying sensitivity of plants to herbicides. Manufacturers attempt to provide products safe to the largest possible number of species.

Before planting

The most successful approach to a weed-free landscape is to control per-

ennial grasses and broadleaf weeds prior to planting.

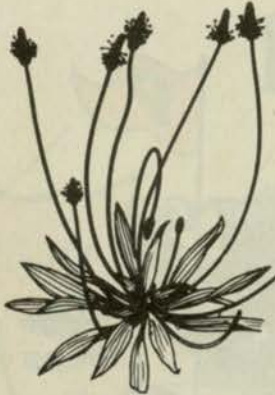
Spraying the weeds in the planting area with postemergence systemic herbicides will kill the root system as well as the topgrowth. Such herbicides include 2,4-D and related products for broadleaf weed control, dalapon for grass control, and amitrole for general weed control. These may have to be applied more than once for complete kill. Each has a specific waiting period prior to planting. Glyphosate is very effective and has no soil residue.

Fumigation of plant beds is another alternative. Vapam is one of the simplest fumigants to use. It is applied and watered into the soil. The water seals the surface, but plastic can also be used to cover the bed after the fumigant is applied and watered in. The fumigant will also kill insects and some fungi detrimental to plants. Planting can take place within days following treatment.



Broadleaf Weeds

Even though selective controls exist to remove broadleaf weeds from grass they exhibit amazing tenacity often requiring multiple treatments.



Buckhorn



Mouse-eared Chickweed



Common Chickweed



Dandelion



Ground Ivy



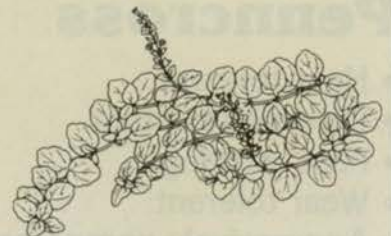
Heal-all



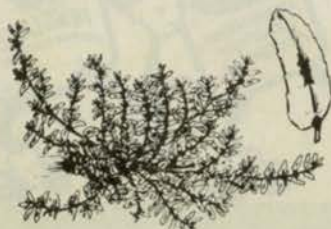
Henbit



Plantain



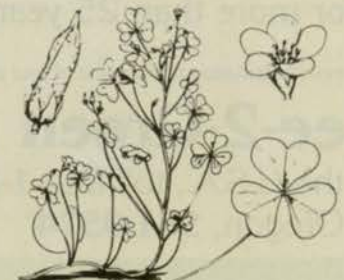
Speedwell



Spurge



White Clover



Yellow Wood Sorrel

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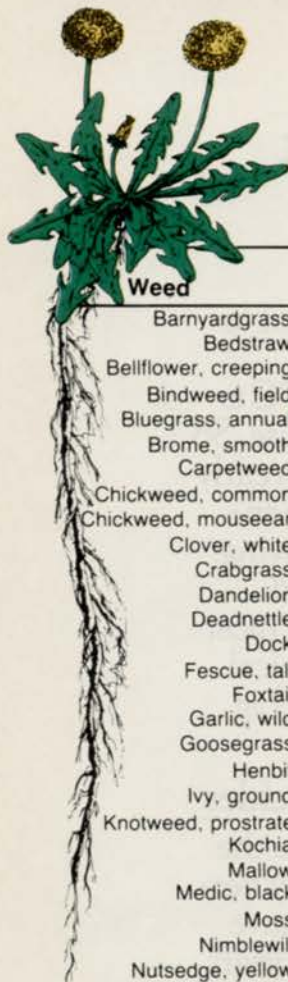


CHART 1
Growth and treatment periods

Weed	SPRING			SUMMER			FALL			WINTER		
	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
Barnyardgrass												
Bedstraw												
Bellflower, creeping												
Bindweed, field												
Bluegrass, annual												
Brome, smooth												
Carpetweed												
Chickweed, common												
Chickweed, mouseear												
Clover, white												
Crabgrass												
Dandelion												
Deadnettle												
Dock												
Fescue, tall												
Foxtail												
Garlic, wild												
Goosegrass												
Henbit												
Ivy, ground												
Knotweed, prostrate												
Kochia												
Mallow												
Medic, black												
Moss												
Nimblewill												
Nutsedge, yellow												
Pigweed, prostrate												
Plantain												
Puncturevine												
Purslane, common												
Quackgrass												
Sanbur												
Shepherdspurse												
Sorrel, red												
Speedwell												
Spurge, prostrate*												
Thistle, Canada												
Thistle, musk												
Vervain, prostrate												
Violets												
Waterleaf (nyctelea)												
Woodsorrel, yellow												
Yarrow												

— Active period of plant growth. Varies from year to year and from north to south.
 — Apply preemergence chemicals.
 — Apply postemergence treatments. Approximate periods may vary two weeks from season to season.

* Preemergence herbicide applications should be made a second time in late June or early July.

Fumigants and nonselective herbicides will kill desirable plant material contacted by them. Care must be taken to protect nearby trees and shrubs which cannot be moved.

A number of preemergence herbicides are labelled for ornamentals and two are recommended for use prior to planting. Eptam or Treflan can be incorporated into the soil, follow-

ing tillage, to control annual and some perennial weeds for a period of four to six weeks. Following incorporation to a depth specified on the label, ornamentals can be planted. This method has been used extensively by commercial nurserymen and is now being used by landscape contractors to a large extent, especially where maintenance for a specified period of time

is in a planting contract.

Tillage as a method of weed control prior to planting is a successful practice for the control of annual weeds but not perennial weeds. In some cases, tillage only cuts up the root systems of perennials into smaller pieces and distributes them.

Landscape fabrics are growing in use for low maintenance areas. The black plastic cover has been improved to a knitted fabric which allows water and nutrients through but blocks light and growing weeds. These are useful in mulched beds where plants are spaced out. They are impractical for groundcover areas and they do not control germination of weed seeds in the mulch above the fabric.

The most successful approach to a weed-free landscape is to control perennial grasses and broadleaf weeds prior to planting.

After planting

In recent years, the landscape industry has made extensive use of mulches to prevent weeds in the landscape. Mulches should be applied two-inches deep and renewed to that depth annually. Mulch layers deeper than two inches accomplish little and actually harm shallow-rooted ornamentals which will root into the mulch instead of into the soil.

The most popular mulches are Cypress and pinebark mulches, as well as wood chips, peat moss, and various hulls. Materials which are not composted or inorganic, can rob the soil below of important nitrogen. Composting or sterilization also kills any weed seeds in the mulch.

Preemergence materials can be used in combination with mulches to stop germination of weed seeds in the mulch or those deposited by birds and wind. They control annual weeds for a period of four to eight weeks. Reapplication is usually necessary for season-long control.

Determine the amount of pre-emergence herbicide to be applied by figuring the area of the plant bed, measuring the proper amount for that area, and distributing it evenly in the area.