

Postemergent Herbicides for Use in Ornamentals¹

Jeffrey G. Norcini and Chris Marble²

Postemergent herbicides are applied directly to weeds. These herbicides are most effective when the weeds are small and actively growing. Effectiveness of these herbicides generally is reduced if the weeds are under stress. If perennial weeds are large, try spot applications of a translocated herbicide in late summer or early fall. The herbicide usually must remain on the plant several hours to be effective. The length of time the herbicide needs to stay on the weed to be absorbed is called “rainfastness.” Check the herbicide label, because the time can vary by herbicide and by herbicide formulation. Therefore be sure the herbicide isn’t washed off by rain or a sprinkler within the specified period. Also try to avoid applying postemergent herbicide to weeds that are wet from dew, rain, or irrigation. It is often more effective to spray postemergent herbicides in the morning after dew has dried. Wind is usually the calmest in the morning, reducing the chance of herbicide drift onto nearby ornamentals, and

plant metabolic activity tends to be higher in the morning, which facilitates herbicide uptake and movement within plant tissues.

Some postemergent herbicides can be applied over the top of ornamental plants. The herbicides listed in Table 1 can be safely used over the top of some ornamentals when used according to label directions.

Table 2 lists postemergent herbicides that are registered for use around ornamental plants when applied as a directed spray. When using these herbicides, be sure that the herbicide does not contact desirable vegetation. Use of a shielded spray nozzle or wick applicator is recommended when applying these types of postemergent herbicides in the vicinity of ornamentals or turf.

1. This document is ENH95, one of a series of the Environmental Horticulture Department, UF/IFAS Extension. Original publication date March 1999. Revised November 2014. Visit the EDIS website at <http://edis.ifas.ufl.edu>.

2. Jeffrey G. Norcini, former Extension specialist, North Florida REC; and Chris Marble, assistant professor, Department of Environmental Horticulture, Mid Florida REC; UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county’s UF/IFAS Extension office.

U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place, dean for UF/IFAS Extension.

Mention of a commercial or herbicide brand name or chemical does not constitute a recommendation or warranty of the product by the authors or UF/IFAS, nor does it imply approval of the product to the exclusion of other products that may also be suitable. Products should be used according to label instructions and safety equipment required on the label and by federal or state law should be employed. Pesticide registrations may change, so it is the responsibility of the user to ascertain if a pesticide is registered by the appropriate state and federal agencies for its intended use.

Table 1. Postemergent herbicides +C2:H32 that can be applied over the top of tolerant ornamental species. "X" indicates that the herbicide is registered for this location.

Herbicide		Nursery		Landscape	Greenhouse
Trade name	Active ingredient(s)	Container	Field		
Acclaim® Extra	fenoxaprop-ethyl	X	X	X	
Weeds Controlled: Many grasses; temporary suppression of some perennial grasses; will not control broadleaf weeds or sedges.					
Comments: Be careful when using this herbicide around ornamental grasses.					
Asulox®	sodium salt of asulam	X*	X*		
Weeds Controlled: Many annual grasses, horseweed (marestail).					
Comments: Commercial use only. *Use only on selected conifer species including junipers, yews, and podocarpus; check label for specific species. Apply only 1 time per year; do not use a surfactant.					
Basagran® T/O	bentazon	X	X	X	
Weeds Controlled: Many broadleaf weeds including coffee senna, beggar-ticks, dayflower, Pennsylvania smartweed, Canada thistle, sesbania, shepherd's purse, wild mustard, and wild poinsettia; also yellow nutsedge. Will not control grasses.					
Comments: Can be applied over the top of several ornamental species including arborvitae, boxwood, dusty miller, hollies, impatiens, English ivy, liriopse, marigold, snapdragon, and yew, as well as several others. Apply only 1 time per year. Thorough coverage is needed. Do not apply to rhododendron or sycamore.					
Certainty®	sulfosulfuron		X	X	
Weeds Controlled: annual and perennial broadleaves, grasses, and sedges including yellow and purple nutsedge, kyllinga, dallisgrass, johnsongrass, and wild garlic.					
Comments: Can be applied over the top of several ornamental species including arborvitae, bougainvillea, boxwood, gardenia, holly, Asiatic jasmine, juniper, liriopse, mugo pine, and goldmound spirea. Generally safe for use on warm season native grasses including bluestem, blue grama, buffalograss, indiagrass, lovegrass, and switchgrass.					
Envoy Plus™	clethodim	X	X	X	X
Weeds Controlled: Many annual and some perennial grasses; will not control broadleaf weeds or sedges.					
Comments: Be careful when using this herbicide around ornamental grasses.					
Fusilade® II, Ornamec® 170	fluzifop-butyl	X	X	X	X
Weeds Controlled: Many annual and some perennial grasses, including torpedograss; will not control broadleaf weeds or sedges. For control of common bermudagrass, two applications 7–14 days apart will be necessary.					
Comments: Be careful when using this herbicide around ornamental grasses. Fusilade® II is specifically labeled for use in greenhouses, while Ornamec® is not.					
Goal® 2XL	oxyfluorfen	X**	X**		
Weeds Controlled: Several broadleaf and grassy weeds including barnyard grass, red and white clover, giant foxtail, large crabgrass, henbit, wild mustard, common lambsquarters, prickly lettuce, and witchgrass.					
Comments: **Over-the-top applications limited to conifers only (several juniper spp., arborvitae spp., and pine spp.). Check the label for specific species. Provides both pre- and postemergent weed control. . Postemergent control significantly better when weeds are small.					
Image®	imazaquin			X	
Weeds Controlled: Several annual and perennial broadleaves, field sandbur and perennial ryegrass, sedges (yellow and purple nutsedge, kyllinga), wild onion, wild garlic.					
Comments: Do not apply to soil where annual bedding plants may be planted the following year or plant injury may result.					
Lontrel® Turf & Ornamental	clopyralid		X	X	
Weeds Controlled: Many annual and perennial broadleaf weeds including clover, dandelion, thistle, dollarweed, and groundsel.					
Comments: Do not apply to or near desirable legumes (pod-bearing plants such as acacia, locust, mimosa, redbud), linden, composites such as perennial daisies and sunflowers, or solanaceae (nightshade family) species. Do not tank-mix with other herbicides. Do not use a surfactant.					

Herbicide		Nursery		Landscape	Greenhouse
Trade name	Active ingredient(s)	Container	Field		
Sethoxydim SPC	sethoxydim	X	X	X	
Weeds Controlled: Many annual and some perennial grasses; will not control broadleaf weeds or sedges.					
Comments: Be careful when using this herbicide around ornamental grasses.					
TerraCyte®	sodium carbonate peroxyhydrate	X			X
Weeds Controlled: moss, algae, liverwort					
Comments: Repeated applications will be needed. Wash all granulars off of plant foliage immediately after application.					

Table 2. Postemergent herbicides that are applied as directed sprays. "X" indicates that the herbicide is registered for this location.

Trade name	Active ingredient(s)	Labeled uses				
		Nursery		Landscape		Greenhouse
		Container	Field	Container	Field	
Axxe®	ammonium nonanoate	X	X	X	X	X
Weeds Controlled: Annual broadleaf and grass weeds; some small perennial weeds may also be controlled. Also controls mosses and liverworts.						
Comments: Thorough coverage is needed. Rainfast in 2 hours.						
Finale®	glufosinate	X	X	X	X	X
Weeds Controlled: Many broadleaf weeds and grasses as well as some woody species.						
Comments: Thorough coverage necessary; rainfast in 4 hours.						
Gramoxone® SL	paraquat		X			
Weeds Controlled: Annual broadleaf and grass weeds; some small perennial weeds may also be controlled.						
Comments: Restricted-use pesticide; highly toxic. Thorough coverage is needed. Provides fast burn-down of susceptible weeds. Rainfast in 30 minutes.						
GreenMatch® EX	lemon grass oil	X	X	X	X	X
Weeds Controlled: Annual broadleaf and grass weeds; some small perennial weeds may also be controlled.						
Comments: Most effective on weeds that are less than 6 in. tall. Thorough coverage is needed.						
Reward®	diquat	X	X	X	X	X
Weeds Controlled: Will kill most young, actively growing annual weeds. Only above-ground growth of biennials and perennials will be affected.						
Comments: Thorough coverage is needed; repeat applications may be necessary.						
RoundUp® Pro and others	glyphosate	X	X	X	X	X
Weeds Controlled: Most broadleaf weeds and grasses as well as some woody species.						
Comments: Use for eliminating weeds around container beds and in field nurseries. Ornamentals cannot be present inside greenhouse during application. Check specific product labels for use instructions.						
Scythe®	pelargonic acid	X	X	X	X	X
Weeds Controlled: Controls both annual broadleaf and grass weeds that are less than 6 inches in height.						
Comments: Thorough coverage is needed; repeat applications may be necessary.						
SedgeHammer®	halosulfuron				X	
Weeds Controlled: Yellow and purple nutsedge; will suppress kyllinga and horsetail.						
Comments: Can be applied around any established woody ornamental species. Allow 3 months after transplanting before application.						
Vinegar herbicides	acetic acid	X*	X*	X*	X*	X*
Weeds Controlled: Small annual grass and broadleaf weeds						
Comments: * Many acetic acid products are available, but only those labeled as herbicides are legal to use for weed control. Check specific product labels for use sites. Acetic acid concentrations over 10% are corrosive to skin and can cause irreversible eye damage. Restricted entry interval (REI) is typically 48 hours. Use with caution.						