

Postemergent Herbicides for Use in Ornamentals¹

Jeffrey G. Norcini and Chris Marble²

Introduction

Postemergence herbicides are herbicides that are applied with the goal of controlling weeds after emergence (germination). This publication was written for nursery growers and landscape pest control companies to provide information on postemergence herbicides labeled for use in and around ornamental plants.

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 plant before being washed off is called “rainfastness”; this is the amount of time the herbicide needs to adequately dry or be absorbed by plant tissues (check the label, as the time can vary). Therefore, be sure the herbicide isn’t washed off by rain or a sprinkler within the specified period.

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.

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

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.

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Table 1. Postemergence herbicides that can be applied over the top of tolerant ornamental species. “X” indicates that the herbicide can be used for this location. This table lists registered pesticides that should be integrated with other pest management methods. Contact your local UF/IFAS Extension office for additional information (<https://ifas.ufl.edu>). Contact: Weed Specialist (marblesc@ufl.edu). Table 1.

Herbicide		Labeled uses			
Trade name	Active ingredient(s)	Nursery		Landscape	Greenhouse
		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.					
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, lirioppe, marigold, snapdragon, and yew, and several others. Thorough coverage is needed. Apply only 1 time per year.					
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, lirioppe, 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	fluazifop-butyl	X	X	X	X
Weeds Controlled: Many annual and some perennial grasses, including torpedograss; will not control broadleaf weeds or sedges. 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.					
Sceptor® T/O	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 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.					
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.					
Segment® II	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.					

Table 2. Postemergence herbicides that can be applied as directed sprays. “X” indicates that the herbicide can be used for this location. This table lists registered pesticides that should be integrated with other pest management methods. Contact your local UF/IFAS Extension office for additional information (<https://ifas.ufl.edu>). Contact: Weed Specialist (marblesc@ufl.edu).

Herbicide		Labeled uses			
Trade name	Active ingredient(s)	Nursery		Landscape	Greenhouse
		Container	Field		
Axxe®	ammonium nonanoate	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. More effective on smaller weeds. Do not apply to weeds that are wet from dew, rain, or irrigation. Rainfast in 2 hours.					
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: Thorough coverage is needed. Do not apply to sycamore or rhododendron.					
Certainty®	sulfosulfuron	X	X		
Weeds Controlled: annual and perennial broadleaves, grasses, and sedges including yellow and purple nutsedge and kyllinga. Comments: Can be applied as a directed spray around any established warm-season ornamental grass or woody ornamental species in the landscape.					
Dismiss®	sulfentrazone	X	X	X	
Weeds Controlled: annual and perennial broadleaf and sedge weed species, including yellow and purple nutsedge and kyllinga species. Comments: Repeat applications may be needed for perennial sedge species. Can be used as a directed application in labeled landscape or container-grown ornamentals.					
Finale®	glufosinate	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.					
GreenMatch® EX	lemon grass oil	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.					
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 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.					
Reward®	diquat	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®	glyphosate	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.					
Scythe®	pelargonic acid	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 horseweed (maretail). Comments: Can be applied around any established woody ornamental species. Wait 3 months after transplanting before application.					
Vinegar herbicides	acetic acid	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.					