

You Better Watch Out! – Herbicide/Ornamental Combinations to Avoid

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Herbicides

- One option for weed management
- Can reduce hand-weeding costs
- Potential for crop damage if wrong herbicide or formulation is chosen

Herbicide and Overwintering Houses/Greenhouses

- No preemergence herbicides labeled for use in pots in enclosed structures
- Vapors can cause plant damage
- Apply preemergence herbicides 2 weeks before covering

Formulations/Adjuvant effects

- Avoid overtop applications of EC forms and oil-based adjuvants (crop oils), especially during summer
 - Pennant Magnum, Pendulum EC best applied dormant
- Use granular or WDG/DF forms, as well as nonionic surfactants when spraying overtop, especially to tender growth

Herbicides that have both preemergence and postemergence contact effect

Oxyfluorfen - sold by itself as Goal, Galigan; sold in combinations as Rout, OH2, Regal 0-0, Showcase

Flumioxazin – BroadStar, SureGuard

Oxadiazon – Ronstar, and in combination as Kancel+, RegalStar, PrePair

- Do not apply to tender foliage, species that trap granules
- Symptoms – leaf spotting/burning, stem girdling, injury to breaking buds

Oxyfluorfen (Goal, Galigan, Rout, OH2, Regal 0-0, Showcase)

Flumioxazin (BroadStar, SureGuard)

Oxadiazon (Ronstar, Kansel, RegalStar, PrePair)

- Do not apply to annual bedding plants
- Do not apply to most herbaceous perennials, including bulbs
- Do not apply to plants that funnel granules – yucca, hosta, etc.



Oxyfluorfen (Goal, Galigan, Rout, OH2, Regal 0-0, Showcase)

Flumioxazin – BroadStar, SureGuard

Oxadiazon – Ronstar, RegalStar, PrePair

For best results:

- apply to dormant plants
- avoid applications when plants are flushing
- apply granules to dry foliage
- irrigate to remove granules from leaves or use a leaf blower
- mulch after application

Impact of Formulation (spray vs granule)

Oxyfluorfen – spray Goal, Galigan

Granule- Rout, OH2, Regal 0-0, Showcase

Flumioxazin – spray SureGuard, granule -
BroadStar

Oxadiazon – spray Ronstar 50 WSP

granule Kancel +, RegalStar, PrePair, Ronstar
2G

- Sprays only on conifers, directed spray shade trees
- Granules on shrubs

Flumioxazin (BroadStar)

- Can injure hydrangea, viburnum, butterfly bush, privet, spirea, wax myrtle
- Injury may be cultivar dependent, plant size dependent

Dichlobenil (Casoron)

- can injure hemlock, fir, spruce or pines, especially if treated when young
- Check tolerance in Ilex, potentilla, viburnum, lilac
- Do not apply to bedding plants or herbaceous perennials



Simazine (Princep, others)

- Do not apply to bedding plants or perennials
- Tolerance may be rate dependent
- Use lower rates, combine with a grass herbicide
- Use lower rates on sandy or gravelly soils
- Can injure dwarf burning bush, hydrangea, forsythia, lilac, and mock orange



Isoxaben (Gallery, Snapshot, Showcase)

- Injures Danes rocket, oxeye daisy, the mustard family, sedum, ajuga, lambsear, Veronica
- Injures dwarf burning bush (*Euonymus alata compacta*), hydrangea, and lilac



Dinitroaniline herbicides

Yellowish-orange chemicals

Preemergence weed control wide range of
ornamentals (woody and herbaceous)

Injury symptoms – root inhibition, stem
brittleness/breakage

- Oryzalin (Surflan, XL)
- Pendimethalin (Pendulum, Corral, others)
- Prodiamine (Barricade, Regalkade)
- Trifluralin (Treflan, Preen, others)

Annual bedding plants – impact of dinitroaniline formulation

- EC most injurious
- WDG, water-based forms intermediate
- Granules safest (Treflan, Pendulum 2G, etc.)

- Stunting, reduced flowering, tip damage with sprays
- Also seen in pansy with dithiopyr sprays (Dimension)



Annual bedding plants

- Transplant
- Irrigate to settle soil
- Apply granular herbicide like Pendulum 2G
- Irrigate
- Mulch

Oryzalin (Surflan)

- Do not apply to Douglas fir, hemlock, or true firs, especially on seedbeds, liner beds, and young plants
- Check tolerance in photinia, azalea / avoid overtop sprays

Species more herbicide sensitive - azalea, barberry, hydrangea, and dwarf burning bush

- Test cultivar sensitivity using a few plants prior to wide-spread use
- Azalea – Snapshot
- Barberry – granular
- Hydrangea – few registered herbicides
- Dwarf burning bush – Surflan, Casoron, Devrinol

Clopyralid (Lontrel, Stinger)

- can severely injure members of the aster, legume, and nightshade families, including asters, mums, coreopsis, redbud, and locust, along with damaging English ivy, hosta.



Fluazifop (Fusilade/Ornamec)

Check the label for juniper, azalea and other cultivar restrictions

Bentazon (Basagran)

- Few species tolerate overtop applications
- Avoid contact with conifers – burning of needles,
- Can injure sycamore, variegated liriope, certain azalea cultivars if applied overtop
- Use directed sprays

Halosulfuron (Manage, Sedgehammer)

- Use - directed spray around established woody ornamentals in landscapes
- Do not use in bedding plants or herbaceous perennials
- Injures cotoneaster, crape myrtle, English ivy, liriope, hosta, butterfly bush, privet, viburnum with overtop applications

Glyphosate (Roundup Pro, others) Glufosinate (Finale)

- Keep off desired foliage
- Keep off the bark of young trees
- Keep glyphosate off suckers
- Use caution with glufosinate around conifers

Herbicide Use

- Test new products in small areas first
- Use dormant applications when possible
- Consider granular applications for greater safety
- Use directed sprays under high temperature, high humidity conditions

