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 Kansel+, 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 Kansel +, 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