

WHAT'S NEW IN HERBICIDES?

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I. Introduction

The two newest and most commonly used nursery herbicides are Goal (manufactured by Rohm & Haas) and Modown (manufactured by Rhone-Poulenc). I would like to spend the next few minutes talking about the basic uses of these two herbicides and then open the session up for discussion as to your experiences with Goal and Modown.

II. Goal 2E Herbicide

A. Active ingredient is 2 lbs. a.i. of oxyfluorfen per gallon.

B. Uses for Goal

- Conifer seedbeds (pre-emergence) apply after seeding but prior to conifer germination.
- Apply 1-4 pints of Goal 2E as a pre-emergence application.
- Broadcast spray beds and irrigate immediately with 1/2" to 3/4" of sprinkler irrigation.
- Apply in a minimum of 20 gallons of water per treated area.

C. Goal 2E may be applied to the following conifer seedbeds:
Loblolly pine, Slash pine, Longleaf pine, Shortleaf pine,
Eastern white pine, Virginia pine, Ponderosa pine, Lodgepole
pine, Douglas-fir, Colorado blue spruce.

D. Post-emergence use of Goal

- Apply 1-2 pints of Goal 2E per acre.
- Apply no sooner than 5 weeks after emergence of conifer seedlings. Use this application with caution because some nurseries have experienced some damage to seedlings using this application. Make sure seedlings are well hardened off.
- Weeds should be less than 4" in height at time of application.
- Apply in minimum of 20 gallons of water per treated acre.

- Broadcast spray beds and allow sufficient time for Goal 2E to exhibit contact weed control activity before irrigating seedbeds.

E. Conifer Transplants

- The following species may be transplanted from seedbeds and sprayed directly with Goal 2E providing bud break has not occurred. Spraying after bud break is not recommended until new growth is completely hardened off. (Western Hemlock, Ponderosa pine, Lodgepole pine, Douglas-fir, Noble fir, Loblolly pine, Shortleaf pine, Slash pine, Eastern white pine, Longleaf pine and Virginia pine).

F. Goal 2E is most effective pre-emergence on grasses. Grasses controlled are Barnyardgrass, Giant Foxtail, Goosegrass, Large crabgrass, annual bluegrass, wild oats and some other susceptible species.

G. Broadleaf weeds controlled by Goal 2E are common chickweed, carpetweed, Common Lambsquarter, Common purslane, smartweed, Common yellow woodsorrel and other susceptible species.

H. Consult the Goal 2E label for complete use instructions and a complete list of weeds controlled by Goal.

III. Modown 4 Flowable Herbicide

A. Active ingredient is 4 lbs. a.i. of bifenox per gallon.

B. Modown used to be formulated as an 80% wettable power but is now a flowable formulation.

C. Uses for Modown

- Forest Tree Nursery Seedbeds (Pre-emergence and Postemergence).
- In the Western United States for use on: California red fir, Douglas-fir, Grand Fir, Noble Fir, White Fir, Monterey pine, Ponderosa pine, Sugar pine, Redwood, Russian Olive, Blue spruce, Western Hemlock.

E. Pre-emergence Treatment

- Apply 3 qts./acre in 25-50 gallons of water.
- Apply to seedbeds within 48 hours after sewing seed.
- Apply to dry beds with low pressure (20-40 psi) spray.
- Sprinkler irrigate with 1/2 to 3/4 inch of water immediately after application.

F. Post-emergence Treatment

- Same rate as pre-emergence treatment may be applied to extend weed control when tree seedlings are at least 4 weeks old.
- Immediately sprinkler irrigate after application to wash the herbicide off the seedlings.

G. Forest Seedbed use Precautions

- Do not apply more than 6 quarts of Modown 4 Flowable (6 pounds active ingredient per acre) per season.
- Do not use on seedbeds with less than 1% organic matter.
- Treat only small areas until effects of soil and other local environmental conditions on herbicide activity and the reaction of forest tree seedlings has been determined.

H. Use Modown for control of: Annual bluegrass, Australian burnweed, carpetweed, common chickweed, Filaree, corn spurey, Lambsquarters, common mallow, morning glory, pigweed, purslane, and other susceptible weeds.

I. Consult a Modown 4 Flowable label for complete use instructions and a complete list of weeds controlled.

IV. Closing Statement

- Use all pesticides with caution. If you are trying a pesticide you have never used before, only treat a small area to be sure you are making a viable treatment.
- Keep accurate records of all treatments (weather, soil type, temperature, rates used, etc.)
- Handle pesticides safely and always follow the label instructions.