

Silvicultural Herbicide Prescriptions

HERBACEOUS WEED CONTROL

LOBLOLLY, SLASH AND LONGLEAF PINES (MOST SITES)

DUPONT™ OUSTAR® HERBICIDE

Rates

1st year weed control

10 to 12 ounces per acre

12 to 16 ounces per acre

16 to 19 ounces per acre

After 1st year weed control

12 to 16 ounces per acre

16 to 19 ounces per acre

18 to 24 ounces per acre

Coarse-textured soils

Medium-textured soils

Fine-textured soils

Timing

Apply Oustar® before weeds emerge or shortly thereafter. Applications typically can be made from mid-February until mid-June.

Application guidelines

- Application by helicopter, tractor, skidder or backpack sprayer.
- Optimal results when applied before weeds emerge.
- Weed control can generally be expected to last from late spring to midsummer, usually 60 to 90 days into the growing season, depending on environmental conditions.
- Earlier applications tend to result in better and longer weed control.
- Applications to containerized longleaf pine seedlings should be made only after root growth has occurred.
- Oustar® also may be used to impregnate or coat dry bulk fertilizer to be applied to conifer plantations. Refer to the product label for impregnation procedures and precautions, as well as application methods and timing.

LOBLOLLY AND SLASH PINES

DUPONT™ OUST® EXTRA HERBICIDE FORMULATED WITH XP TECHNOLOGY

Rate

2½ to 4 ounces per acre (loblolly pine)

2½ to 3 ounces per acre (slash pine)

Application guidelines

- For control of broadleaf weeds and grasses as specified on the product container label including, but not limited to, blackberry, bahiagrass and sericea lespedeza.
- Oust® Extra also may be used to impregnate or coat dry bulk fertilizer to be applied to conifer plantations. Refer to the product label for impregnation procedures and precautions, as well as application methods and timing.

TANK MIXES

DUPONT™ OUST® EXTRA HERBICIDE PLUS ARSENAL AC HERBICIDE

LOBLOLLY PINE

Rate

2 to 4 ounces per acre plus 4 to 6 ounces Arsenal AC per acre

SLASH PINE

Rate

2 ounces per acre plus 4 ounces Arsenal AC per acre

Application guideline

- In addition to the pests listed under the weeds controlled section on the Oust® Extra product label, the tank mix will suppress perennial grasses such as bermudagrass and johnsongrass.

EASTERN WHITE PINE

DUPONT™ OUST® XP HERBICIDE

Rate

1 to 1.5 ounces per acre

Timing

Make application just before weed emergence or shortly thereafter.

HARDWOOD SEEDLINGS

Species

American sycamore
Ash
Bald cypress
Oaks
Red maple
Sweetgum
Yellow poplar

OUST® XP HERBICIDE

Rate

1 to 4 ounces per acre

Timing

Application should be applied before seedlings or transplants break dormancy (bud swell stage).

Application guidelines

- Control of labeled herbaceous weeds through late spring and early summer. Expect rapid weed recolonization once the treatment control starts to break.
- Follow-up maintenance applications of other products are typically necessary for successful hardwood establishment.
- Careful consideration must be given by an experienced and knowledgeable forester to match the requirements of the hardwood tree species to the conditions of the site. Treatment of species mismatched to the site may injure or kill the trees.

SITE PREPARATION

FORESTRY SITE PREPARATION FOR LOBLOLLY, LONGLEAF, VIRGINIA, SHORTLEAF AND SLASH PINES (UPLAND WELL-DRAINED SITES)

DUPONT™ VELPAR® ULW SOLUBLE GRANULE HERBICIDE FOR FAST-GROWING PINE PLANTATIONS

Rate

4 to 6½ pounds per acre

- Use lower rates on coarse-textured soils low in organic matter.
- Use higher rates on fine-textured soils high in organic matter or where species to control are listed as “partial control” or suppression predominates.

Timing

Apply in the spring after danger of a killing frost has passed, usually between March 1 and June 15.

Application guidelines

- Rate, soil texture and activating rainfall are key performance factors.
- Velpar® ULW can be applied using appropriately modified ground or aerial equipment.
- Refer to the product label for brush species controlled. Known resistant species include American beautyberry, yellow poplar and *Vaccinium spp.*
- Where desired, a site-prep burn may follow after two defoliations of brush, usually 60 days after an activating rainfall of 1 inch or more.

CONIFER PLANTATIONS — SITE PREPARATION FOR LOBLOLLY, LONGLEAF AND SLASH PINES

DUPONT™ OUST® EXTRA HERBICIDE FORMULATED WITH XP TECHNOLOGY

Rate

3 to 4 ounces per acre (loblolly pine) or 3 ounces per acre (slash pine) mixed with either:

- A minimum of 32 ounces Chopper herbicide (or 16 ounces Arsenal AC) plus surfactant per label requirements.
- A minimum of 24 ounces Chopper herbicide (or 12 ounces Arsenal AC) plus 32 ounces Accord SP (or the same ai of an equivalent glyphosate product) plus surfactant per label requirements.
- A minimum of 77 ounces OneStep herbicide plus surfactant per label requirements.

Timing

Application from full leaf expansion until leaf drop or frost, usually late May through mid-October by helicopter or skidder.

Application guidelines

- Applications from late July until leaf drop will provide control of weeds and grasses as they germinate during fall, winter and early spring, resulting in control of herbaceous weeds 60 to 90 days or longer into the first growing season (spring herbaceous weed control).
- Avoid applications during periods of severe drought.
- Use enough water (10 to 30 gallons by air) to assure coverage of target vegetation.
- Following these recommendations for site preparation for treatments made after August 1 will qualify for the performance assurance program of 80 percent free-to-grow seedlings from labeled brush species two growing seasons after treatment. (See free-to-grow definition on the last page.)

CONIFER PLANTATIONS — CONTROL OF RESIDUAL PINE AND HARDWOODS IN THE ESTABLISHMENT OF PINE PLANTATIONS

DUPONT™ KRENITE® S HERBICIDE

PINE CONTROL ONLY

- 2 to 4 quarts per acre (when burning of site is allowed) plus the maximum rate of surfactant per label requirement
- 4 to 6 quarts per acre (when burning of site is not allowed) plus the maximum rate of surfactant per label equipment

FOR BROAD-SPECTRUM BRUSH CONTROL AS WELL AS PINE CONTROL

4 to 5 quarts per acre plus a minimum of 0.375 pounds ai imazapyr plus the maximum rate of surfactant per label requirement

- 12 ounces Arsenal AC (0.375 pounds ai imazapyr)

Timing

Apply as a foliar spray from midsummer to when the targeted pests begin defoliation in late summer or fall.

For herbaceous weed control the following year add: 3 to 4 ounces DuPont™ Oust® Extra herbicide after August 1 to the above tank mix for control of herbaceous weeds and grasses into the first growing season.

Application guidelines

- When targeting Virginia pine use a minimum of 5 quarts per acre of Krenite® S.
- Apply as a foliar spray.
- For aerial application, use a minimum of 10 gallons per acre.
- Use sufficient water to ensure complete coverage. Coverage is critical. Only pines receiving complete coverage will be susceptible to Krenite® S applications.
- Complete results may not be evident until one full year after application.
- Avoid applications during periods of extreme drought.

RELEASE FROM WOODY COMPETITION

CONIFER PLANTATIONS — LOBLOLLY PINE

DUPONT™ ESCORT® XP HERBICIDE

Rate

1 ounce per acre plus 10 to 16 ounces per acre Arsenal AC (imazapyr) plus labeled pine release surfactant per label requirements

Timing

Application from August 1 until leaf senescence of target species, which usually occurs about mid-October, or as determined by target vegetation conditions.

Application guidelines

- Loblolly pine plantations that need release from competitive hardwoods, vines and brambles. The best growth response will be realized where crop trees have not been severely suppressed by overtopping competition.
- Controls or suppresses many competitors such as sweetgum, oak, maple and others.
- Application by helicopter or broadcast ground equipment.
- Use enough water to ensure coverage of target vegetation.
- Brush suppression of DuPont labeled species for 80 percent free-to-grow pines two seasons after treatment. (See free-to-grow definition on the last page.)
- Species not considered in free-to-grow evaluations include: elderberry, redbud and devil's-walking-stick, as well as many waxy-leaf trees and shrubs.

DUPONT™ OUST® EXTRA HERBICIDE

Rate

4 ounces per acre plus 10 to 16 ounces per acre Arsenal AC (imazapyr) plus labeled pine release surfactant per label requirements

Application guidelines

- Adds herbaceous weed and grass control in the spring and early summer of the subsequent growing season.
- Especially beneficial for plantations in their early stages of growth or where an aggressive nutrition program is being implemented (fertilization).
- Brush suppression of DuPont labeled species for 80 percent free-to-grow pines two seasons after treatment. (See free-to-grow specifications as noted in conifer site-prep recommendations.)
- Species not considered in free-to-grow evaluations include: elderberry, redbud and devil's-walking-stick, as well as many waxy-leaf trees and shrubs.

KUDZU APPLICATIONS

DUPONT™ ESCORT® XP HERBICIDE

Rate

4 ounces per acre plus surfactant per label requirements

DUPONT™ OUST® EXTRA HERBICIDE

Rate

8 ounces per acre plus surfactant per label requirements

Timing

Make applications during the period from full leaf expansion in the spring until development of full fall coloration, which is usually mid-October or first frost.

Application guidelines

- Handgun applications of 100 to 150 gallons per acre are preferred for best coverage. Thoroughly spray foliage and stems without excess runoff.
- For broadcast applications by air (helicopter only) or ground spray volume of 30 gallons per acre minimum should be used. Double-pass application from different directions improves coverage.
- Good coverage of foliage and stems needed for best results.
- Treat any re-sprouts the following season and subsequent seasons for long-term control.
- May be sprayed over the top of desirable pines (loblolly and slash).
- Use a surfactant labeled for pine release.

FREE-TO-GROW PROGRAM

Free-to-grow is defined as any living tree that has no overtopping shade and where side shading of hardwood does not exceed 75 percent of the height of the pine two years after application. A joint evaluation will be made by DuPont and/or our agent and the customer to determine the free-to-grow condition of the stand. If the pine stand is not in a free-to-grow condition, DuPont, as its sole obligation, will pay for the chemical and application costs to retreat the area as necessary to achieve the free-to-grow condition.

FOR MORE INFORMATION

Contact your DuPont forestry representative. And visit us on the Web at forestry.dupont.com.

This reference guide is not intended to substitute for the product label for the product(s) referenced herein. Product labels for the above product(s) contain important precautions, directions for use and product warranty and liability limitations that must be read before using the product. Applicators must be in possession of the product label(s) at the time of application. Always read and follow all label directions and precautions for use when using any pesticide alone or in tank mix combinations.

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