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# Herbicide Options for Rubus spp. Control

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#### **Brief**

There are numerous *Rubus* species, including blackberry, dewberry, and raspberry, collectively called briars. These plants can be troublesome in many of our forest environments. They are competitors for sunlight, water and nutrients and can form dense thickets that can make access to the stand difficult. But, *Rubus spp.* also produce edible fruit in the spring and summer. There may be cases where managers wish to maintain and conserve some blackberry plants. From small patches to large and numerous patches, there are herbicides that work well in controlling briars. One needs to know (1) the environment that the briars are growing in (i.e., a recent cut-over site that is being prepared to for planting, a post-plant scenario in the first year after planting or a post-plant scenario years after planting where the pine stand is overtopping the briars, or a stand where pine straw is to be harvested), (2) the pine species to be planted if a pre-plant scenario or a post-plant scenario (need to know species and age), and (3) and site borders (i.e., mature hardwoods) or plants (woody or herbaceous) within the stand that the landowner does not want to kill.

# Herbicides that Control Blackberry with Stand and Pine Species Considerations

# I. Pre-plant to Establish Loblolly or Slash Pine

Add one of the following to the summer or fall site prep tank

**ESCORT® XP®** Bayer 60% metsulfuron methyl)

- ♦ Apply 1 2 oz Escort XP product per acre
- Pre to early post emergence

# **ACCORD XRT** (DOW AgroSciences 53.6% glyphosate)

♦ 3-4 qts/ac + 1% non-ionic surfactant, MSO or crop oil

## FORESTRY GARLON XRT (DOW AgroSciences 89.3% triclopyr)

♦ Apply at 1-2 qts/ac + 1% non-ionic surfactant, MSO, or crop oil

No mature hardwood border trees restrictions with Accord or Garlon as long as one does not get products on hardwood foliage. If imazapyr (Chopper or Arsenal or a generic equivalent) is used with these products, leave a 1 to 2 tree height buffer away from mature hardwoods on site borders and treat the buffer are with glyphosate or triclopyr if briars are present at time of site preparation.

# II. Pre-plant to Establish Longleaf Pine

Add one of the following to the summer or fall site prep tank

## **ACCORD XRT** (DOW AgroSciences 53.6% glyphosate)

♦ 3-4 qts/ac + 1% non-ionic surfactant, MSO or crop oil

#### FORESTRY GARLON XRT (DOW AgroSciences 89.3% triclopyr)

♦ Apply at 1-2 qts/ac + 1% non-ionic surfactant, MSO, or crop oil

No mature hardwood border trees restrictions with Accord or Garlon as long as one does not get products on hardwood foliage. If imazapyr (Chopper or Arsenal or a generic equivalent) is used with these products, leave a stay 1 to 2 tree heights buffer away from mature hardwoods on site borders and treat the buffer are with glyphosate or triclopyr if briars are present at time of site preparation.

# III. Post-plant over loblolly and slash pine

# **ESCORT® XP®** (Bayer 60% metsulfuron methyl)

- ♦ Apply 1/3 2 oz Escort XP product per acre
- ♦ Pre to early post emergence

## **VELPAR DF** (Bayer 75% hexazinone)

- ♦ May cause mortality where excessive rates are applied on sandy soils, ensure proper sprayer calibration to apply precise herbicide rate per acre, following label recommendations regarding specific herbicide rates for various soil types
- ♦ 1<sup>st</sup> Year weed control application product rates per acre (the same amounts can be applied in years 2, 3, and 4):
  - 1 1/3 lb Course textured soils (loamy sand, sandy loam)
  - $1 \frac{1}{3} 1 \frac{1}{2}$  lb Medium textured soils (loam, sandy clay loam, silt, silt loam)
  - $1\frac{1}{2}$   $1\frac{4}{5}$  lb Fine textured soils (sandy clay, silty clay loam, silty clay, clay, clay loam)
- Weed control application product rates per acre for established trees (> 4-yrs-old):
  - $1 \frac{1}{3} 1 \frac{2}{3}$  lb Course textured soils
  - $1 \frac{2}{3} 2 \frac{1}{3}$  lb Medium textured soils
  - $2 \frac{1}{3} 2 \frac{2}{3}$  lb Fine textured soils
- ♦ Optimum timing: Pre to early post emergence (March early May)

#### **VELPAR L** (Bayer 25% Hexazinone)

- ♦ May cause mortality where excessive rates are applied on sandy soils and/or soils with low organic matter, ensure proper sprayer calibration to apply precise herbicide rate per acre, following label recommendations regarding specific herbicide rates for various soil types
- ♦ 1<sup>st</sup> Year weed control application product rates per acre (the same amounts can be applied in years 2, 3, and 4):
  - 21 to 32 oz Course textured soils (loamy sand, sandy loam)
  - 24 to 40 oz Medium textured soils (loam, sandy clay loam, silt, silt loam)
  - 28 to 48 oz Fine textured soils (clay, clay loam, sandy clay, silty clay loam, silty clay)
- ♦ After 4<sup>th</sup> year weed control application product rates per acre:
  - 21 to 40 oz Course textured soils
  - 28 to 56 oz Medium textured soils
  - 36 to 64 oz Fine textured soils
- ♦ Optimum timing: Pre to early post emergence (March early May)

# IV. Post-plant over longleaf pine

# **VELPAR DF** (Bayer 75% hexazinone)

- May cause mortality where excessive rates are applied on sandy soils, ensure proper sprayer calibration to apply precise herbicide rate per acre, following label recommendations regarding specific herbicide rates for various soil types
- ♦ 1<sup>st</sup> Year weed control application product rates per acre (the same amounts can be applied in years 2, 3, and 4):
  - 1 1/3 lb Course textured soils (loamy sand, sandy loam)
  - $1 \frac{1}{3} 1 \frac{1}{2}$  lb Medium textured soils (loam, sandy clay loam, silt, silt loam)
  - 1 ½ 1 4/5 lb Fine textured soils (sandy clay, silty clay loam, silty clay, clay, clay loam)
- Weed control application product rates per acre for established trees ( $\geq$  4-yrs-old):
  - $1 \frac{1}{3} 1 \frac{2}{3}$  lb Course textured soils
  - $1 \frac{2}{3} 2 \frac{1}{3}$  lb Medium textured soils
  - $2 \frac{1}{3} 2 \frac{2}{3}$  lb Fine textured soils
- ♦ Optimum timing: Pre to early post emergence (March early May)

#### **VELPAR L** (Bayer 25% Hexazinone)

- ♦ May cause mortality where excessive rates are applied on sandy soils and/or soils with low organic matter, ensure proper sprayer calibration to apply precise herbicide rate per acre, following label recommendations regarding specific herbicide rates for various soil types
- ♦ 1<sup>st</sup> Year weed control application product rates per acre (the same amounts can be applied in years 2, 3, and 4):
  - 21 to 32 oz Course textured soils (loamy sand, sandy loam)
  - 24 to 40 oz Medium textured soils (loam, sandy clay loam, silt, silt loam)
  - 28 to 48 oz Fine textured soils (clay, clay loam, sandy clay, silty clay loam, silty clay)
- ♦ After 4<sup>th</sup> year weed control application product rates per acre:
  - 21 to 40 oz Course textured soils
  - 28 to 56 oz Medium textured soils
  - 36 to 64 oz Fine textured soils
- ♦ Optimum timing: Pre to early post emergence (March early May)

#### **MILESTONE** (DOW AgroSciences; 40% Aminopyralid)

- ♦ Apply over the top in stands ages 1- through 3-years old. May cause some short-term needle curling, twisting or droop.
- ♦ DO NOT apply over the top of loblolly or slash pines as it will cause severe seedling damage or mortality to these species
- Note that there is an 18 month restriction on the use of hay or mulch following treatment.
- ♦ DO NOT use in active pine straw operations or apply less than 18 months before raking

- Use caution with applications to varying stages of longleaf growth as seedlings with exposed or elongated terminal buds may be injured
- Broadcast applications can be applied using up to 7 fluid oz/ac
- ♦ Applications should be made when blackberry is actively growing with new shoot growth, new fully expanded foliage and during the flowering stage

# V. Post-plant treatments beneath pine canopy

# MILESTONE (DOW AgroSciences; 40% Aminopyralid)

- ♦ Apply beneath the canopy of loblolly, slash and longleaf pines
- ♦ Broadcast applications can be applied using up to 7 fluid oz/ac
- Note that there is an 18 month restriction on the use of hay or mulch following treatment.
- ♦ DO NOT use in active pine straw operations or apply less than 18 months before raking
- ♦ Applications should be made when blackberry is actively growing with new shoot growths of growth, new fully expanded foliage and during the flowering stage

#### **VELPAR DF** (Bayer 75% hexazinone)

- ♦ May cause mortality where excessive rates are applied on sandy soils, ensure proper sprayer calibration to apply precise herbicide rate per acre, following label recommendations regarding specific herbicide rates for various soil types
- $\bullet$  Weed control application product rates per acre for established trees ( $\geq$  4-yrs-old):
  - $1 \frac{1}{3} 1 \frac{2}{3}$  lb Course textured soils
  - $1 \frac{2}{3} 2 \frac{1}{3}$  lb Medium textured soils
  - $2 \frac{1}{3} 2 \frac{2}{3}$  lb Fine textured soils
- ♦ Optimum timing: Pre to early post emergence (March early May)

## **VELPAR** L (Bayer 25% Hexazinone)

- ♦ May cause mortality where excessive rates are applied on sandy soils and/or soils with low organic matter, ensure proper sprayer calibration to apply precise herbicide rate per acre, following label recommendations regarding specific herbicide rates for various soil types
- ♦ After 4<sup>th</sup> year weed control application product rates per acre:
  - 21 to 40 oz Course textured soils
  - 28 to 56 oz Medium textured soils
  - 36 to 64 oz Fine textured soils
- ♦ Optimum timing: Pre to early post emergence (March early May)

## ESCORT® XP® (Bayer 60% metsulfuron methyl)

• For use in Loblolly and slash pine only, DO NOT apply in longleaf stands

♦ Apply 1/3 - 2 oz Escort XP product per acre as pre to early post emergence treatment

# **ACCORD XRT** (DOW AgroSciences 53.6% glyphosate)

- ♦ 3-4 qts/ac + 1% non-ionic surfactant, MSO or crop oil
- Apply as a post emergent treatment to actively growing plants during or just after flowering

# FORESTRY GARLON XRT (DOW AgroSciences 89.3% triclopyr)

- ♦ Apply at 1-2 qts/ac + 1% non-ionic surfactant, MSO, or crop oil
- ♦ Apply as a post emergent treatment to actively growing plants during or just after flowering



Photo 1 and 2. The left photo is a cluster or clump of blackberry that is almost impenetrable to walk through without briar-britches. The photo on the right is the blackberry flowering stage. Note the new green stem growth (2-4 inches) back from the flower. This is a good time to apply most herbicides to control blackberry; in the active growth phase

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