Publication Seri Publication Number 008 WAR NELL THE UNIVERSITY OF FORETA AND NATURAL REPOUNDER THE UNIVERSITY OF SCHEME December 2015

Wisteria (Wisteria sp.) Control Herbicide Options

E. David Dickens – Forest Productivity Professor and David J. Moorhead – Silviculture Professor UGA Warnell School

Brief

There are about ten species of wisteria found in the US that are members of the *Fabaceae* (pea, legume) family. Two wisteria species: Chinese wisteria (Wisteria sinensis) and Japanese wisteria (Wisteria floribunda) are non-native, invasive climbing woody vines. It is often planted as an ornamental in yards and gardens. Wisteria can occupy our SE US forests and can be a competitor in pine stands. If not controlled, it can canopy over tree crowns sometimes killing the trees by blocking adequate sunlight to the foliage for photosynthesis. Wisteria is a deciduous vine that can "climb" trees up to 60 feet or greater heights (Photo 1) or in clumps growing on shrubs or in a clump lower to the ground (Photo 2). The pinnate leaves are alternate with 9 to 19 leaflets and are 6 to 14 inches long (Photo 2). The flowers are produced in pendulous racemes 4 to 30 inches long purple, violet, lavender, pink or white in color. For most wisteria species found the SE US, flowering typically occurs in the spring just before or as the leaf growth initiates. The flowers of some species are showy and fragrant, especially Chinese wisteria. The seeds are produced in pods and are considered poisonous. Wisteria vines encircle tree boles causing sawlog degrade and potential death of the tree as the vines girdle the bole (Photo 3). Wisteria control is best performed during active growth periods from mid-June to early October in Georgia. If wisteria has climbed up into a number of trees, a prescribe burn or cutting the vines to groundline may be needed to get the climbing vines down to groundline where foliar active herbicides will be effective. In either of these cases, the wisteria will be treated during green-up (new green growth) after the burn or cutting.

Herbicides labeled to Control Wisteria

I. Pre-plant to Establish Loblolly, Longleaf, or Slash Pine

Add one of the following to the summer (June – September) site prep tank

ACCORD® XRT (DOW AgroSciences 53.6% glyphosate)

- A FOLIAR active only herbicide
- 2-3 qts/ac + 1% non-ionic surfactant, MSO or crop oil

FORESTRY GARLON® XRT (DOW AgroSciences 89.3% triclopyr)

- A FOLIAR active only herbicide (Garlon 3A, 4 and 4Ultra can be used as well)
- ♦ Apply at 1.25 2.5 qts/ac + 1% non-ionic surfactant, MSO, or crop oil (if applied alone or with Chopper or Arsenal)

MILESTONE® (DOW AgroSciences; 40% Aminopyralid)

• Broadcast applications can be applied using up to 7 fluid oz/ac

• Applications should be made when wisteria is actively growing with new shoots of growth and new foliage

TRANSLINE® (DOW AgroSciences; 40.9% clopyralid)

- Broadcast applications can be applied using 11 to 21 fl. oz. per acre of Transline
- Controls wisteria and most other leguminous plants such as clover, coffeeweed, cocklebur, kudzu, marestail/horesweed, morning glory, partridge pea, ragweed, sicklepod, and vetch

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 equal) is used with these products, stay 1 to 2 tree heights away from mature hardwoods on site borders.

II. Post-plant over-the-top application in Loblolly and Slash Pine Stands

TRANSLINE® (DOW AgroSciences; 40.9% clopyralid)

- Release treatments many be made any time during the growing season. Some needle/leaf curling may occur if applied during active tree growth
- Treatments may be made broadcast over trees of any age
- Broadcast applications can be applied using 11 to 21 fl. oz. per acre of Transline
- Controls wisteria and most other leguminous plants such as clover, coffeeweed, cocklebur, kudzu, marestail/horesweed, morning glory, partridge pea, ragweed, sicklepod, and vetch

III. Post-plant over-the-top application in Longleaf Pine Stands

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
- 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 to new shoots and foliage after flowering

TRANSLINE® (DOW AgroSciences; 40.9% clopyralid)

- Release treatments many be made any time during the growing season. Some needle/leaf curling may occur if applied during active tree growth
- Treatments may be made broadcast over trees of any age
- Broadcast applications can be applied using 11 to 21 fl. oz. per acre of Transline
- Controls wisteria and most other leguminous plants such as clover, coffeeweed, cocklebur, kudzu, marestail/horesweed, morning glory, partridge pea, ragweed, sicklepod, and vetch

IV. Post-plant DIRECT spray in Loblolly, Longleaf, and Slash Pine Stands

ACCORD® XRT (DOW AgroSciences 53.6% glyphosate)

- A FOLIAR active only herbicide
- ♦ 3-5% solution + 1% non-ionic surfactant, MSO or crop oil
- Apply to trumpet creeper foliage as a DIRECT_spray
- DO NOT apply on planted pines or any other desired vegetation
- Application timing is from mid-July into September (prior to leaf color change)

FORESTRY GARLON® XRT (DOW AgroSciences 89.3% triclopyr)

- A FOLIAR active only herbicide (Garlon 3A, 4 and 4Ultra can be used as well)
- Apply at 2-3% solution in water +1% non-ionic surfactant, MSO, or crop oil
- Apply to trumpet creeper foliage as a DIRECT_spray
- DO NOT apply on planted pines or any other desired vegetation
- June September application (with temperature less than 90 degrees F)



Photos 1 and 2. The photo on the left is wisteria growing in a pine stand. The photo on the right is wisteria growing in a clump with flowers and pinnate leaves. Note the new green growth in the right photo. This is a good time to apply the listed above herbicide(s) for best control after initial late spring (June) into summer (July-September) growth.



Photo 3. Wisteria vines girdling the trunk of a pine tree.

Athens, Georgia 30602-2152 Phone: 706.542.6819 • fax: 706.542.5073 An Equal Opportunity/Affirmative Action Institution

In compliance with federal law, including the provisions of Title IX of the Education Amendments of 1972, Title VI of the Civil Rights Act of 1964, Sections 503 and 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990, the University of Georgia does not discriminate on the basis of race, sex, religion, color, national or ethnic origin, age, disability, or military service in its administration of educational policies, programs, or activities; its admissions policies; scholarship and loan programs; athletic or other University-administered programs; or employment. In addition, the University does not discriminate on the basis of sexual orientation consistent with the University non-discrimination policy. Inquiries or complaints should be directed to the director of the Equal Opportunity Office, Peabody Hall, 290 South Jackson Street, University of Georgia, Athens, GA 30602 Telephone 706-542-7912 (V/TDD).Fax 706-542-2822.