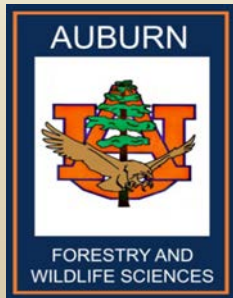


Marengo[®] Herbicide Trial Update

FY 2015 SFNMC Advisory Meeting
Auburn, AL



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Management Cooperative Staff
Auburn University

Marengo[®] /Black willow Rate and Timing Trial



- Black willow seeding into containers continues to be a problem with an expensive solution
- This trial studies the effect of Marengo[®] (indaziflam) on black willow when applied at different rates and times, and
- studies 4 pine species' tolerance to different rates and timing of applications of Marengo[®]

Marengo[®] was applied to 4 pine species
(loblolly, longleaf, shortleaf and slash)

at 3 rates
(low, medium and high)

at 3 application timings
(early only, early and late, and late
only)

**Selecting loblolly trays with
willow to label, count and spray**





Labeling and counting pine and willow in trays



Spraying Marengo® at high rate to 4 species

Loblolly trays placed back onto tables after spraying



Longleaf trays



Shortleaf trays



Slash trays



3 weeks after spraying



**Untreated (left side) and treated (right side)
loblolly pine**

High rate (11.25 oz/ac) application

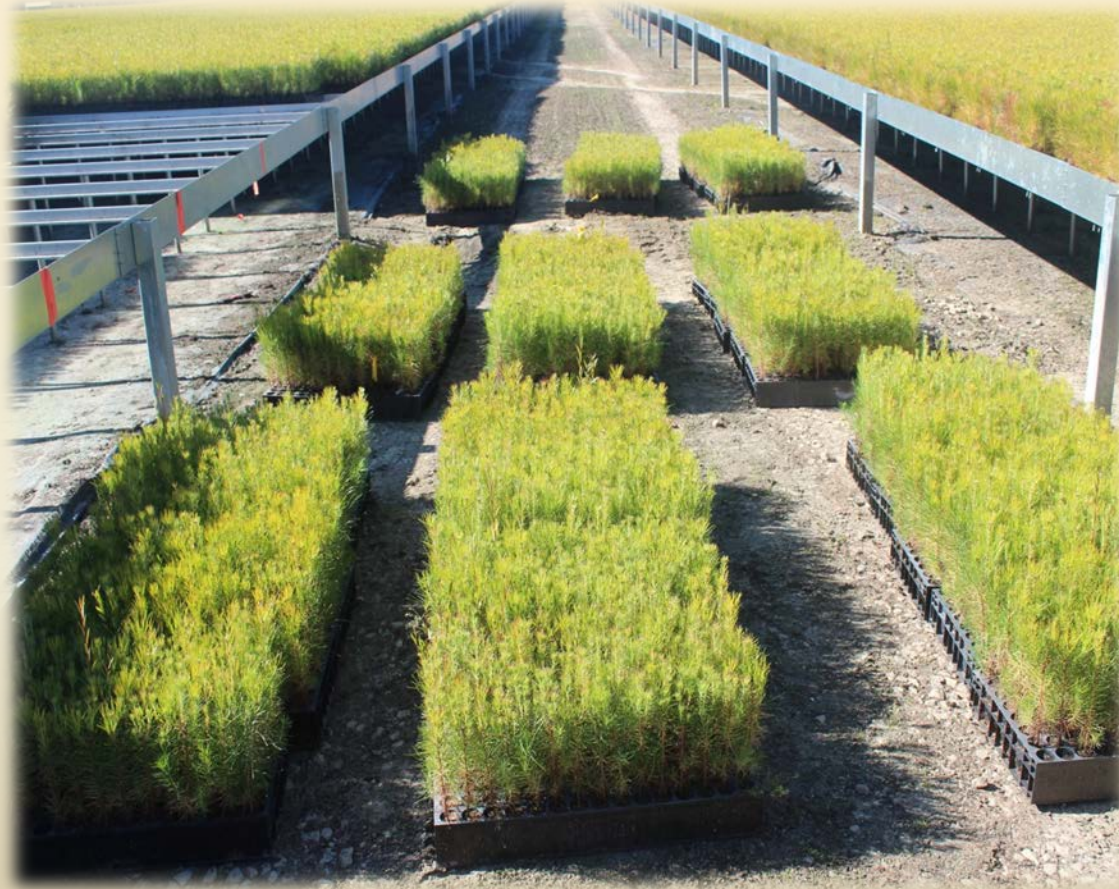
3 weeks after spraying



**Untreated (left side) and treated (right side)
longleaf pine**

Medium rate (7.5 oz/ac) application

Loblolly trays
18 weeks after early spray application
15 weeks after late spray application





Longleaf pine trays



Shortleaf pine trays



Slash pine trays

Trial Evaluation and Seedling Collection

Pine seedling:

- **Survival**
- **Root Collar Diameter**
- **Height**
- **Dry weight**
- **Root Weight Ratio**
- **Root Growth Potential**
- **Black willow and other weed control**



Seedlings at initial tank placement



**Number of new white root tips grown
are indicative of root growth potential
(photo from previous study)**

Seedlings from all 4 species sprayed at all 3 rates at early and late application timing are placed in aerated tanks for 1 month in the greenhouse



Data Collection in November 2014

Preliminary visual analysis:

- **shows good willow and other weed control**
- **possible pine stunting early in season**
- **some stem swelling on higher rates**
- **possible root growth inhibition in top 1" – 2" of containers as indaziflam inhibits growing roots.**

Seedling data will be finalized by the end of this year and results forwarded to members via a Research Report.

Link to OHP, Inc. presentation on Marengo[®]:

http://www.ohp.com/Literature/pdf/Marengo_PPT.pdf