

CONTAINER POST-EMERGENT HERBICIDE TRIAL 2021 INSTALLATION

SFNM 2022 CONTACT MEETING
JULY 18, 2022



Nina Dowling Payne

1

2021 CONTAINER POST-EMERGENT HERBICIDE TRIAL

- Trial proposed by container nursery operator to control weeds appearing during the growing season – requires an over-the-top spray application
- First SFNMC post-emergent herbicide trial in CONTAINERS
- Selected Ronstar®Flo for use because of successful testing in containers as a pre-emergent (at sowing) herbicide in 2017, 2018, and 2019, and target weed listed on label
- Ronstar®Flo label reads 'pre-emergence herbicide' translating to applications made prior to germination of WEEDS

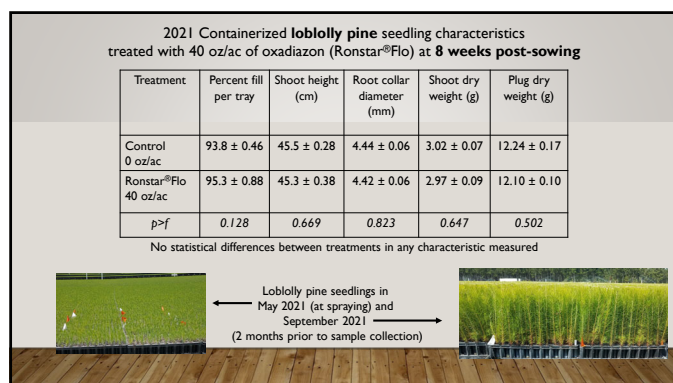
2

2021 CONTAINER POST-EMERGENT HERBICIDE TRIAL

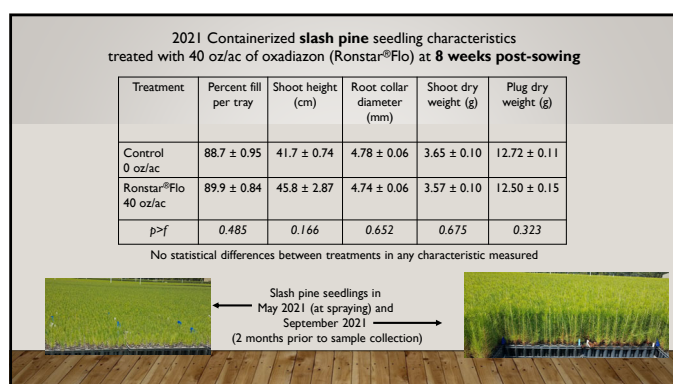
- One rate: 40 oz/ac
- Target weed was oxalis – previous growing season had appeared at 9-10 weeks post-sowing
- Spray applications made on: 8-week-old loblolly
8-week-old slash
9-week-old longleaf
10-week-old longleaf
- Installed at Meeks' Farm and Nursery



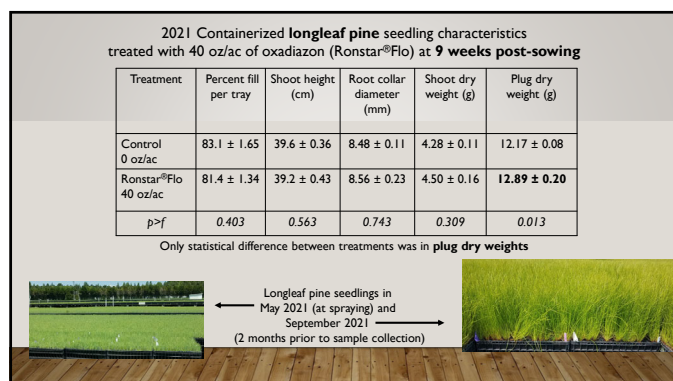
3



4



5

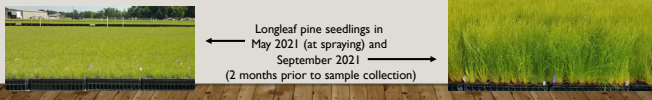


6

2021 Containerized **longleaf pine** seedling characteristics
treated with 40 oz/ac of oxadiazon (Ronstar®Flo) at **10 weeks post-sowing**

| Treatment | Percent fill per tray | Shoot height (cm) | Root collar diameter (mm) | Shoot dry weight (g) | Plug dry weight (g) |
|-------------------------|--------------------------|----------------------|---------------------------------|-------------------------|------------------------|
| Control 0 oz/ac | 86.2 ± 1.52 | 40.6 ± 0.50 | 9.24 ± 0.29 | 4.48 ± 0.14 | 12.98 ± 0.12 |
| Ronstar®Flo 40 oz/ac | 85.0 ± 1.22 | 40.1 ± 0.56 | 8.84 ± 0.12 | 4.35 ± 0.14 | 12.72 ± 0.15 |
| p>f | 0.585 | 0.545 | 0.195 | 0.515 | 0.207 |

No statistical differences between treatments in any characteristic measured



Longleaf pine seedlings in
May 2021 (at spraying) and
September 2021
(2 months prior to sample collection)

7

2021 CONTAINER POST-EMERGENT HERBICIDE TRIAL

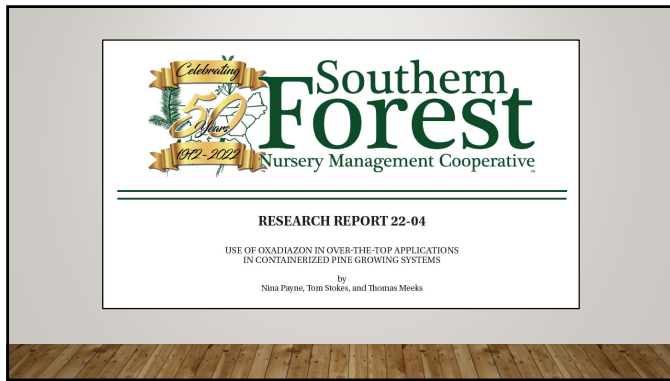
- Fortunately for grower, 2021 season had very few weeds
- Unfortunately for trial, 2021 season had very few weeds – unable to quantify efficacy of post-emergent herbicide application on weed control

8

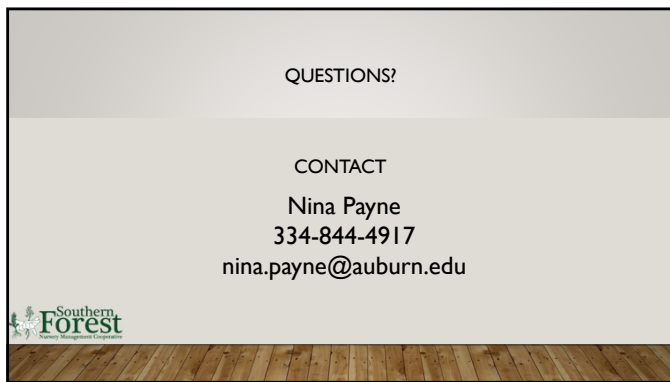
2022 CONTAINER POST-EMERGENT HERBICIDE TRIAL

- Second trial installed at Meeks' Farm and Nursery
- 2 treatments:
control – 0 oz/ac
treatment – 40 oz/ac
- Spray applications made on: 7-week-old longleaf
8-week-old longleaf
- As of July 2022, no visible damage to seedlings has been reported

9



10



11
