

# Drill-Seeding Seedling Emergence

Mia Godbey

For good emergence, we want uniform planting depths, good soil-water-seed contact, and warmer soil temperatures.

We used gibberellic acid to try to encourage rapid emergence.

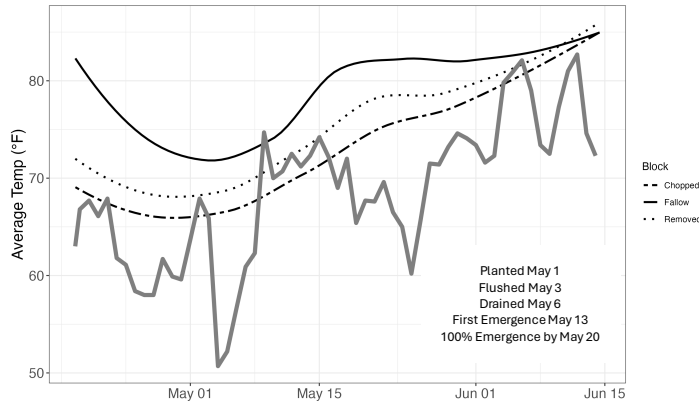
## Gibberellic Acid (GA)

- GA is a plant hormone used to stimulate plant growth and development, especially stem and root elongation during germination
- With GA, seeding depth can be increased to ensure seed placement into soil moisture adequate for germination and emergence to minimize flushing, but the depth should not be more than 1.5 inches.



## RES 2024

- Rice was planted at 150lb/acre with a target depth around 1-inch below the soil surface, but seedling depth varied
- 3 residue treatments – fallow, chopped, removed



HOBO soil temperature sensors placed 2-inches below the soil surface

The fallow treatment had higher average soil temperatures during the emergence period – chopped had the lowest

In cool conditions (daily avg temp of 60-70°F), higher seeding rates are recommended

Saw a very small GA effect

We saw more of a difference in time to emergence

50% emergence arrived faster in fallow on May 14, with chopped reaching 50% emergence a day later on May 15

