Seed Treatment Research

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Insecticidal Seed Treatments
Insecticidal seed treatments

Dermacor X-100 (chlorantraniliprole)
- Controls: RWW, armyworm, borers

- Cruiser (thiamethoxam)

- NipsIt Inside (clothianidin)
  - Controls: RWW, colaspis, aphids,
    - chinch bugs, thrips
Insecticidal seed treatment efficacy

Means from 11 independent field trials across LA, TX, MS, AR
Fortenza (cyantraniliprole) – New Seed Treatment

Synegenta

Available for planting in 2019

Evaluated at Crowley 2015-2018
Fortenza (cyantraniliprole) – New Seed Treatment

Effectively controls weevils but not stemborers

Fortenza alone better than neonicotinoids

Fortenza with Cruiser comparable to Dermacor

Efficacy against clolaspis, armyworms, other pests unknown
Insecticidal seed treatments

**Dermacor X-100** (chlorantraniliprole)
- Can be water-seeded
- Rate per acre

**Fortenza** (cyantraniliprole)
**Cruiser** (thiamethoxam)
**NipsIt Inside** (clothianidin)
- Cannot be water-seeded
- Rate per 100 lbs seed
- Available with fungicides
Selecting Seed Treatments

• Justified in nearly all fields in southern LA

• Price?
  – NipsIt and Cruiser cheaper at low seeding rates, but have reduced control

• Fungicides?
  – Difficult to determine where needed

• Second Crop?
  – Dermacor controls borers
Seed Treatment Combination Trial 2019

Early: $F = 39.5$, df = 9, 27; $P < 0.001$

Late: $F = 21.3$, df = 9, 27; $P < 0.001$

![Bar chart showing RWW/Core results for different treatments and planting times.](chart.png)
Seed Treatment Combination Trial 2019

Early: F = 1.1, df = 9, 30; \( P = 0.392 \)
Late: F = 21.3, df = 9, 27; \( P < 0.001 \)
Selecting Seed Treatments

• **Stem borers**
  – Increasing problem
  – High populations is SW Louisiana
  – Late planting most at risk

• **Armyworms**
  – Can be severe in some cases
  – Late planted rice most vulnerable

• **Colaspis**
  – Greatest threat in soybean rotation
  – Not a problem in crawfish rotation
Research findings 2019
Stem borer yield loss 1-2% per whitehead/m²
Colaspis

Reduces stands following soybeans

Photos by N. Hummel
Seed Treatment Combinations

- *Does not* increase weevil control over Dermacor alone

- *Does* increase spectrum of pests controlled
Questions?

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Call me or your extension agent with any questions.