CONFERENCIA INTERNACIONAL DE ARROZ PARA AMÉRICA LATINA Y EL CARIBE
Innovación para alimentar al mundo
Panamá, 10 al 14 de junio de 2024

Conferencia Internacional de Pyricularia en Arroz y Trigo
Panamá, 10 al 14 de junio de 2024

TEXAS A&M AGRILIFE RESEARCH

Monitoring and control of *Tagosodes orizicolus* in Texas rice, USA

Monitoreo y control de *Tagosodes orizicolus* en el cultivo de arroz en Texas, EE.UU.

Lina Bernaola

Assistant Professor

June 13, 2024

FLAR
Alianza Bioversity & CIAT
CGIAR

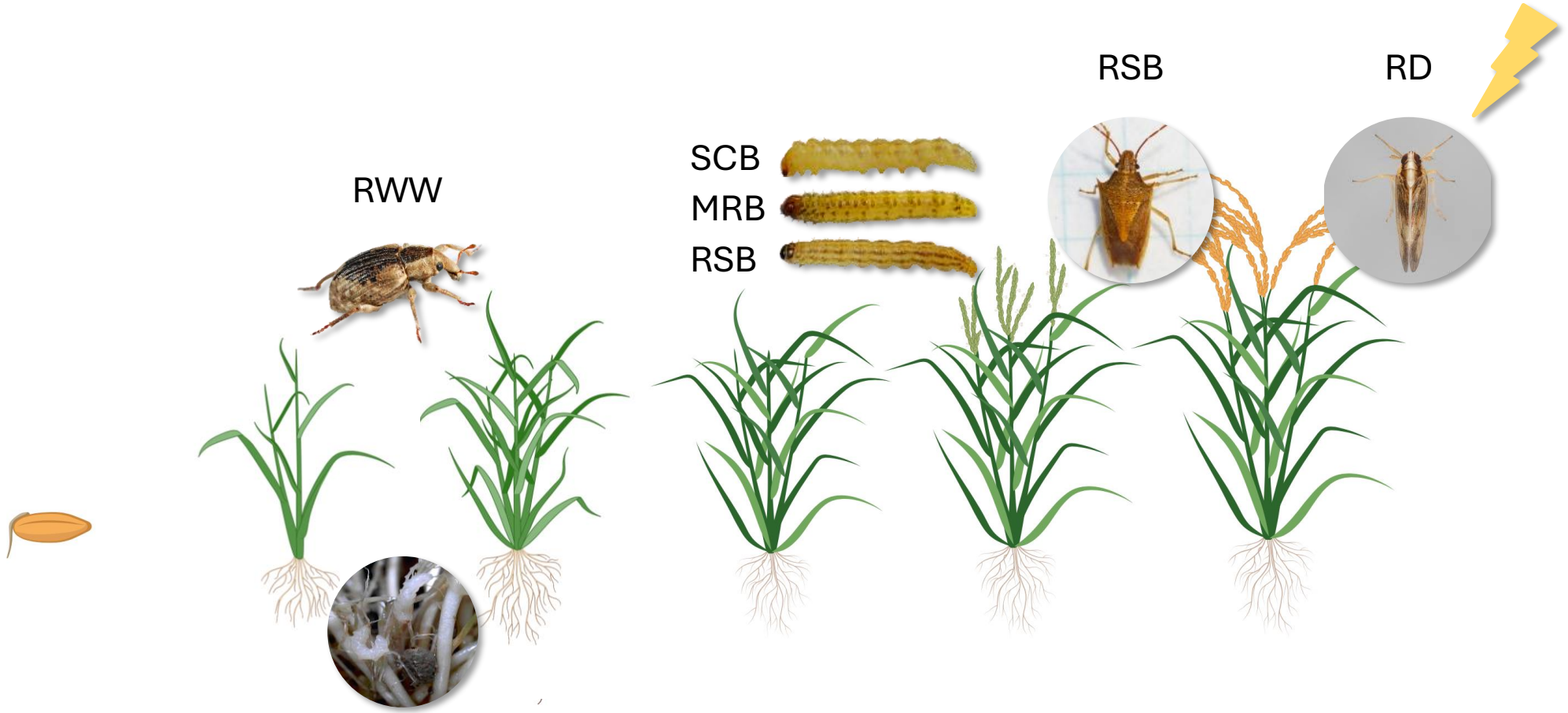
Rice Entomology Program

Texas A&M AgriLife Research Center at Beaumont

Dr. M. O. Way

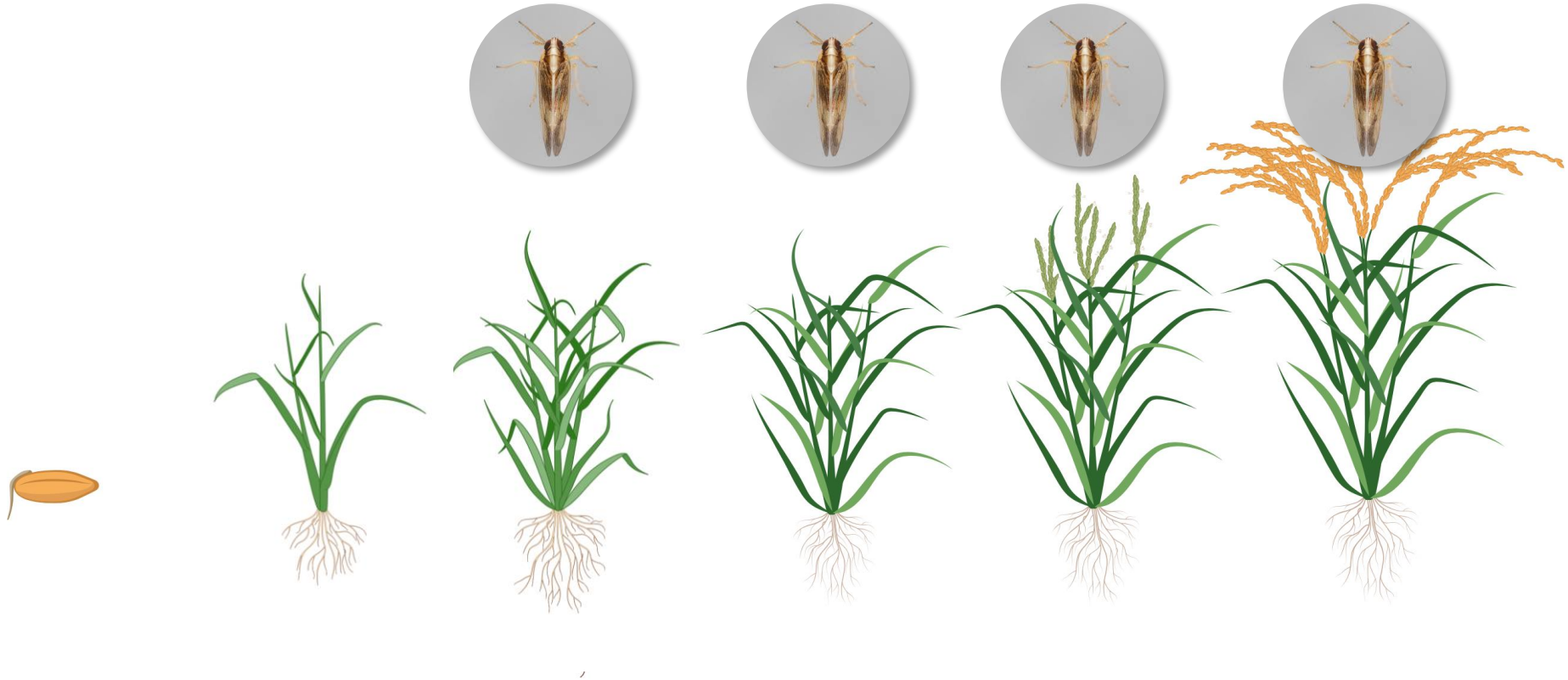
2022-Present

Insect Pests in Texas Rice



Germination	Seedling	Tillering	Panicle Initiation	Flowering	Harvest

Rice delphacid - *Tagosodes orizicolus*



Germination	Seedling	Tillering	Panicle Initiation	Flowering	Harvest

Rice delphacid - *Tagosodes orizicolus*

♂ adult | ♀ adult | Egg | 5th instar | Short wing adult

Types of Damage

Damage by feeding

‘Hopperburn’

Types of Damage

Damage by feeding

‘sooty mold’
Source: E. Rojas

Types of Damage

Damage by virus
Source: M. Cruz, CIAT-FLAR

Hoja Blanca
Source: M. Cruz, CIAT-FLAR

Rice Delphacid in Texas

- Important pest from South and Central America
- Invasive pest of rice in the U.S.
- Found in TX in 2015, 2018 - 2023
- Yield reductions

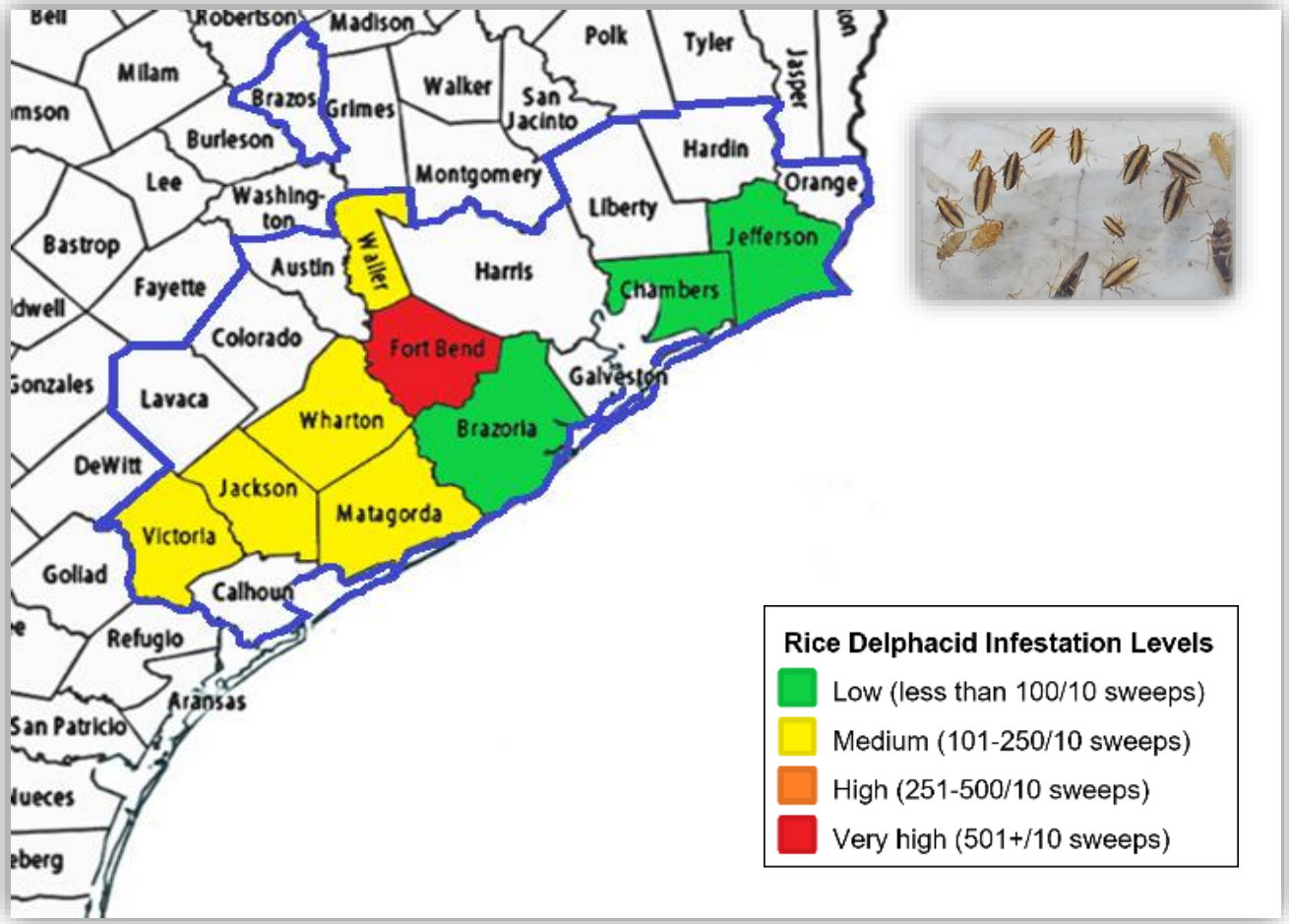
Rice Delphacid Management

- Scouting (by sweep nets)
- No thresholds established yet
- Chemical control
  - ✓ Endigo ZCX (AI: Lambda-cyhalothrin & Thiamethoxam)
  - ✓ Tenchu 20SG: (AI: Dinotefuran)

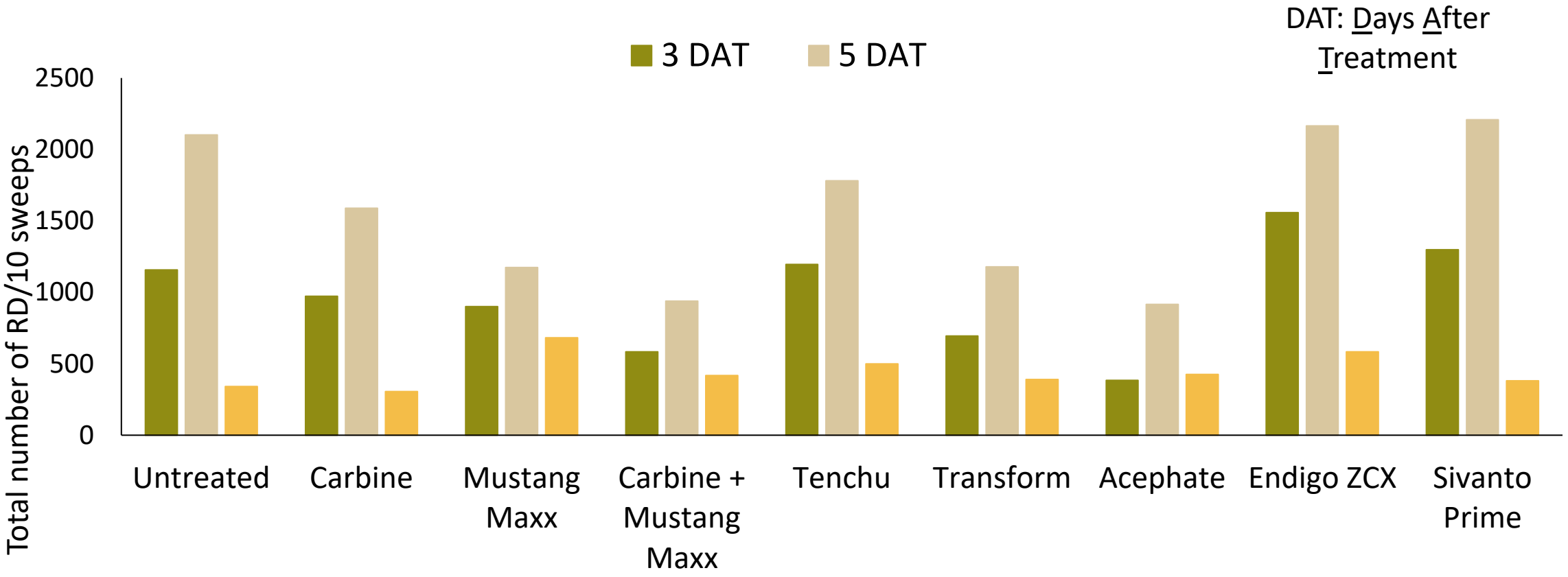
Monitoring Rice Delphacid in Texas, 2022

- Monitoring rice delphacid in rice fields conducted in ten counties (Brazoria, Chambers, Colorado, Fort Bend, Jackson, Jefferson, Matagorda, Victoria, Waller and Wharton)
- Sweep nets were used to collect samples from rice fields
- Rice delphacid samples collected will be tested for presence of Rice Hoja Blanca virus
- Rice delphacid infestation levels were estimated based on sweep samples
- Rice delphacid found in 8 counties (none found in Colorado county)

Monitoring Rice Delphacid in Texas, 2022



RD Insecticide Field Screening, 2022



Future Directions

- Establish threshold guidelines for rice delphacid
- Varietal resistance & chemical ecology of the rice delphacid
- Alternative host species, especially overwintering hosts
- Biological control (natural enemies)
- New active ingredient (AI) screening

Acknowledgments

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Southern IPM Center

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Thank you!