

Corn and Grain Sorghum Diseases

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Corn Diseases in Louisiana

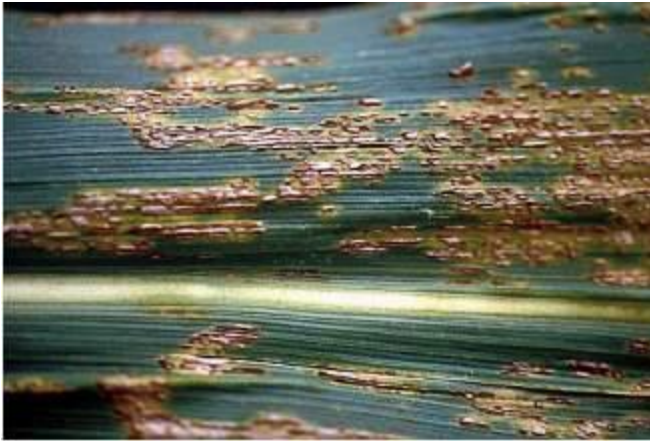
- **Major Corn Diseases**
 - Northern Corn Leaf Blight (NCLB)
 - Common Rust (CCR)
 - Southern Rust (SCR)
- **“Up and coming?” Corn Diseases**
 - Gray Leaf Spot (GLS)
 - Goss’s Wilt (GW)

Northern Corn Leaf Spot



- Resistance
- Residue management
- Fungicides
 - QoI
 - DMI
 - Mixed

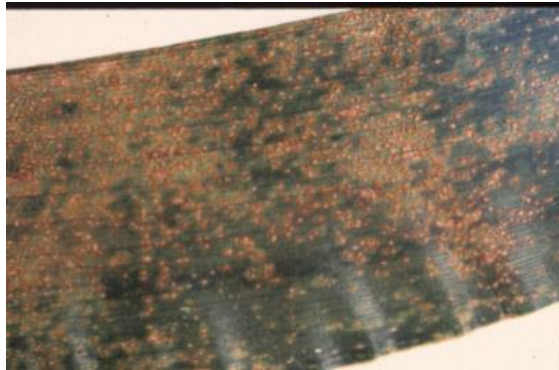
Common Corn Rust



- Resistance
 - QoI
 - DMI
 - Mixed



Southern Corn Rust



- NO Resistance
- Fungicides
 - QoI
 - DMI
 - Mixed



Gray Leaf Spot



- Resistance
- Residue management
- Fungicides
 - QoI
 - DMI
 - Mixed

Goss's Wilt in Louisiana Incidence, Severity and Loss

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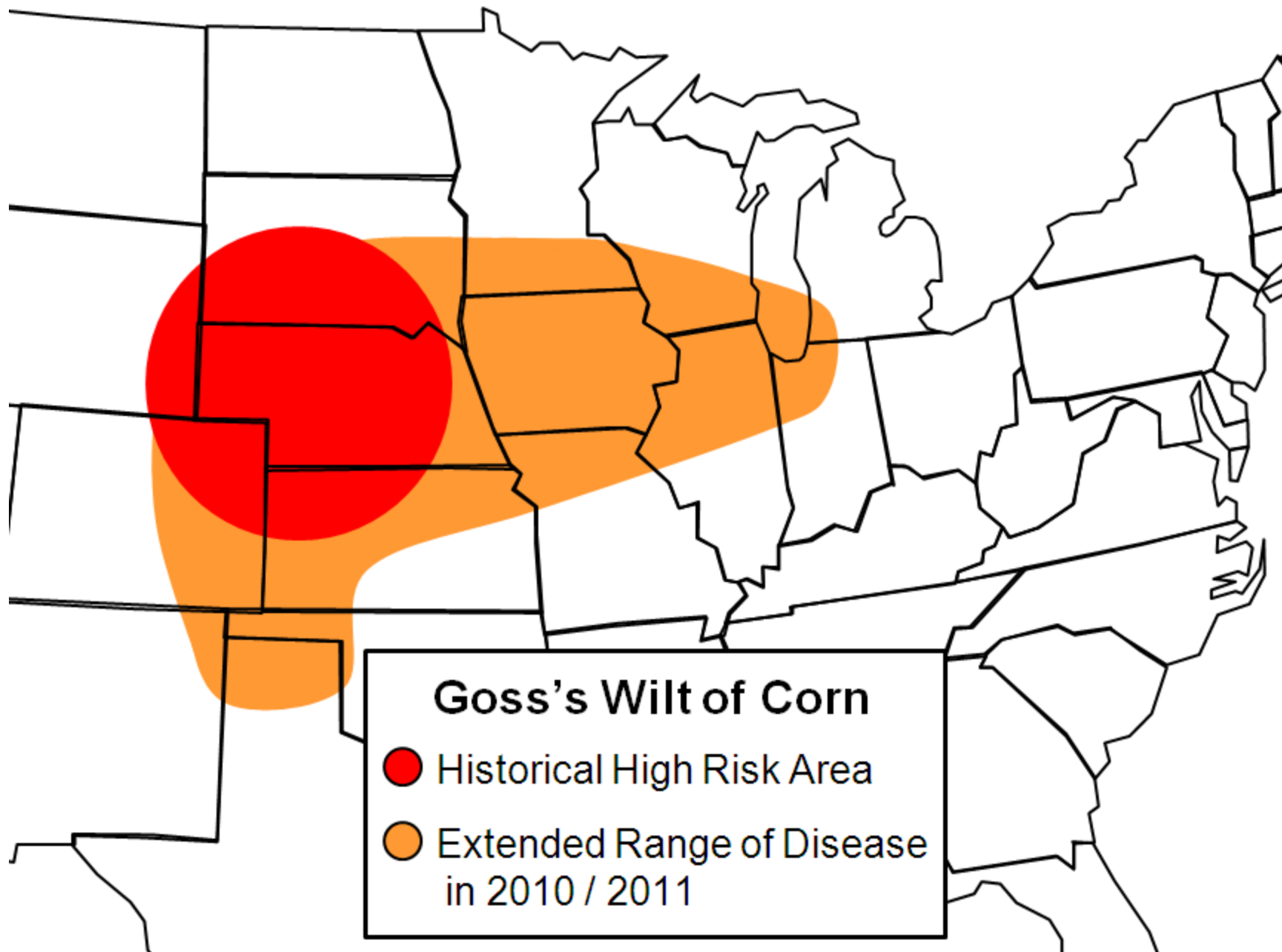
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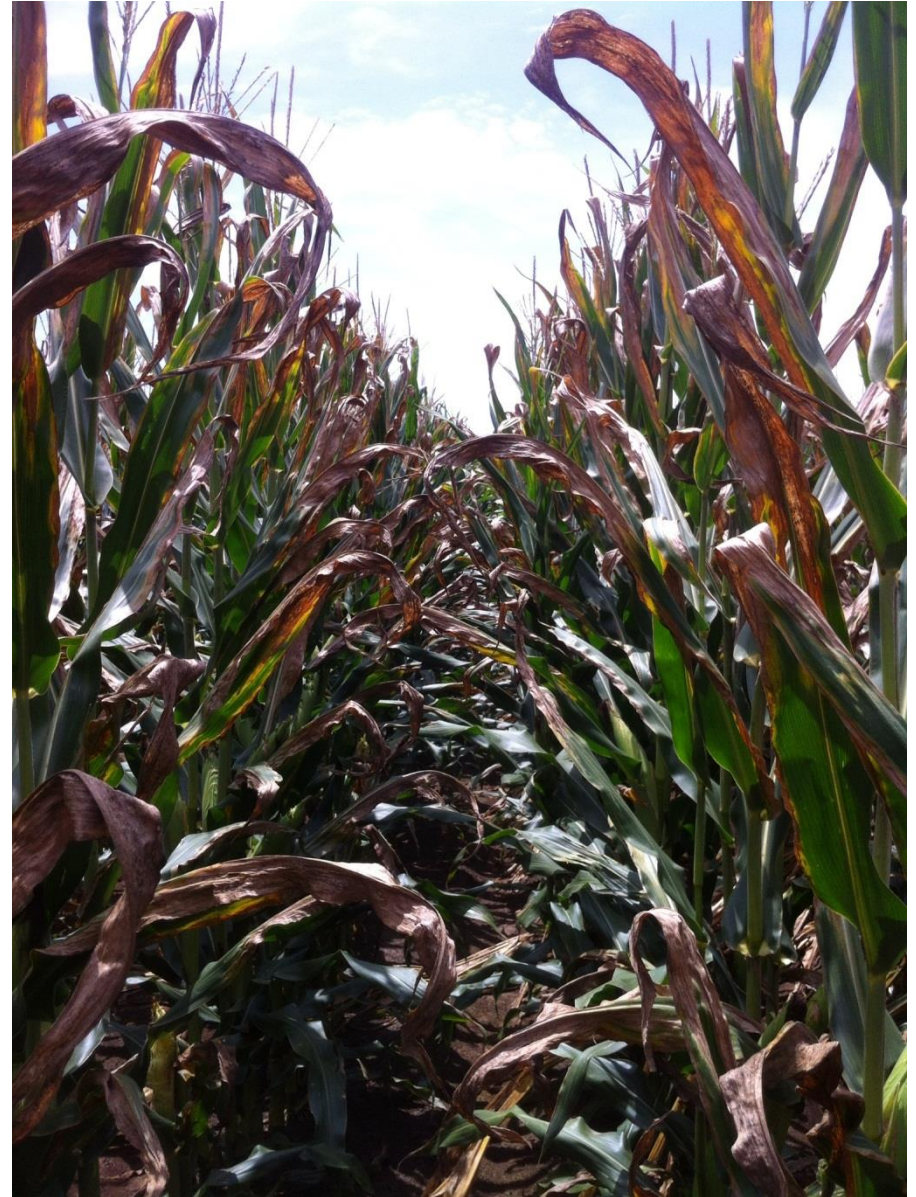


Goss's Wilt

- *Clavibacter michiganensis* subsp. *nebraskensis*
- Spread by seed, wind, splashing water.
- Entrance into the plant by natural openings and wounds.



Goss's Wilt in Louisiana



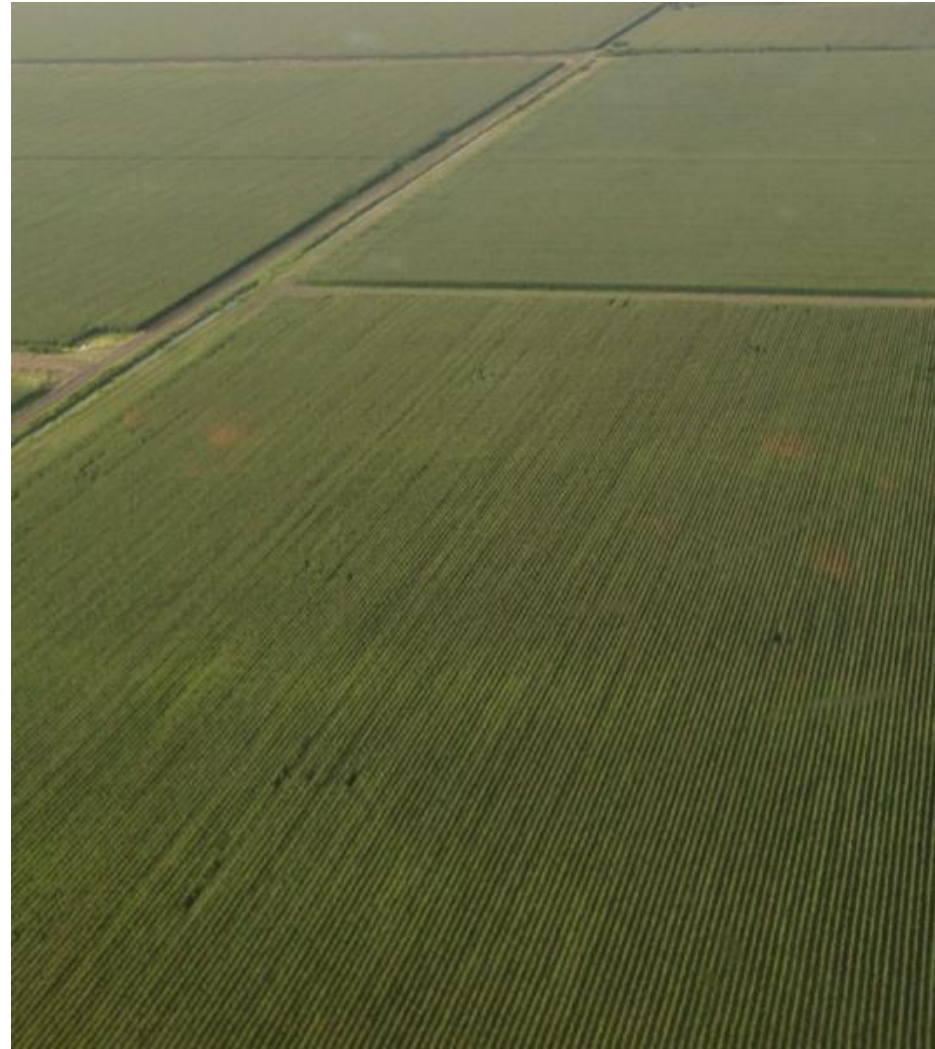
Goss's Wilt in Louisiana



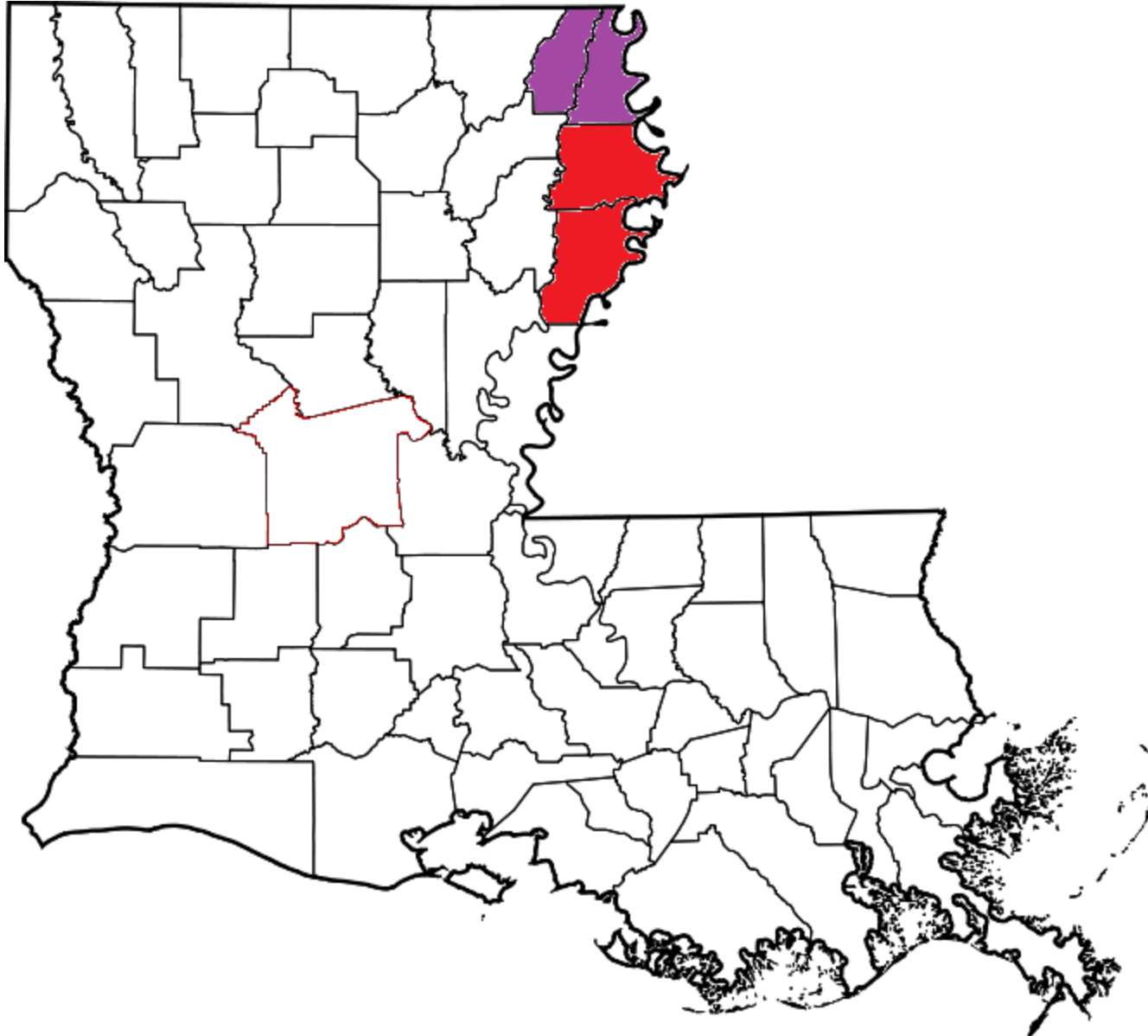
Goss's Wilt in Louisiana



Goss's Wilt in Louisiana



Confirmed Locations



DK 6469

DK 6694

DK 6696

**Not
Widespread**

**How
Transmitted ?**

**Overwintering
Ability in LA
Unknown**

Madison Parish 1

- **Incidence: <6.26%**
- **Severity: 5-100 %**
- **Yield and loss:**
 - **Goss (circle) 187.22 bu/a -**
 - **Area 1 (WSW) 215.67 bu/a -13.19%**
 - **Area 2 (north) 194.91 bu/a -03.94%**
 - **Area 3 (ENE) 202.73 bu/a -07.65%**

Madison Parish 2

- **Incidence: <16.15%**
- **Severity: 5-100 %**
- **Yield and loss:**
 - **Goss (circle) 145.28 bu/a -**
 - **Area 1 (SW) 184.02 bu/a -21.05%**

Recommendations for 2013/2014

- After harvest, bury crop residues.
- In affected fields plant a non-host crop (soybeans).
- Plant resistant hybrids.
- Scout fields often for symptoms of Goss's Wilt.

Unknowns/Problems

- **Its presence in a new location and new environment...so many unknowns!**
- **Source of initial inoculum.**
- **Survivability of the bacterium in crop residue and on weed hosts.**
- **Hybrid screening results.**
- **Area-wide grower response to burying crop residues vs. soil conservation efforts.**

Goss's Wilt: Summary

- **1st observed/confirmed in LA in June, 2013**
- **3 NK hybrids in 4 contiguous parishes in NELA**
- **Incidence is low (<1%)**
- **Severity ranges from 0-100%**
- **Yield losses range from ~4-21% in measured areas.**

Grain Sorghum Diseases

- **Major Grain Sorghum Diseases**

- Head Blight

- Anthracnose

- **Management**

- Partial Resistance Available

- Fungicides (QoI, DMI, Mixtures) NLA-mixed results. CENLA - +12-18%. SLA- +20-29%