

INSECT EVALUATIONS

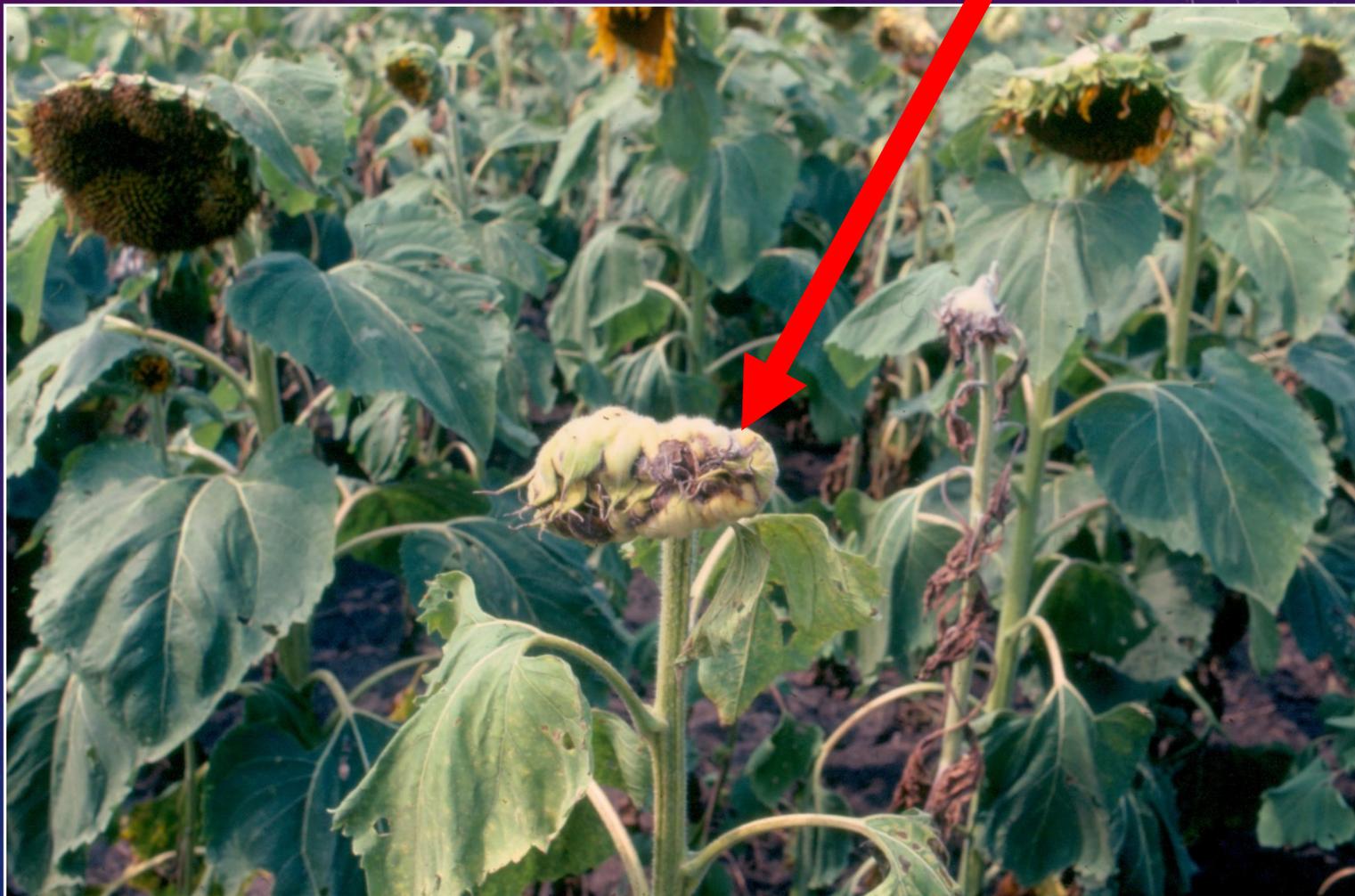
1 - IN-FIELD ASSESSMENTS

2 - SEED SAMPLES

IN-FIELD INSECT ASSESSMENTS

- Midge
- Bud moth
- Seed maggot
- Deform heads, can confuse w/ other causes
- Stem borer (*Dectes texanus*)
- Get presence and severity (%) each year

SUNFLOWER MIDGE DAMAGE



BUD MOTH DAMAGE IN SUNFLOWER

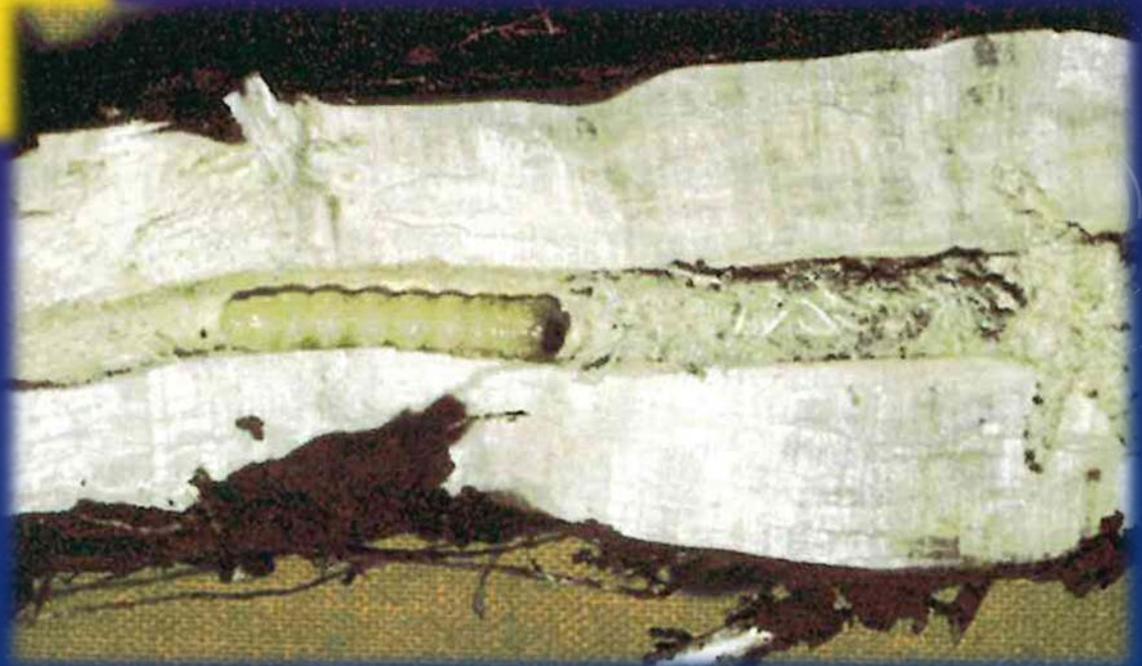


SUNFLOWER SEED MAGGOT DAMAGE



Photo: Dr. J. Knodel

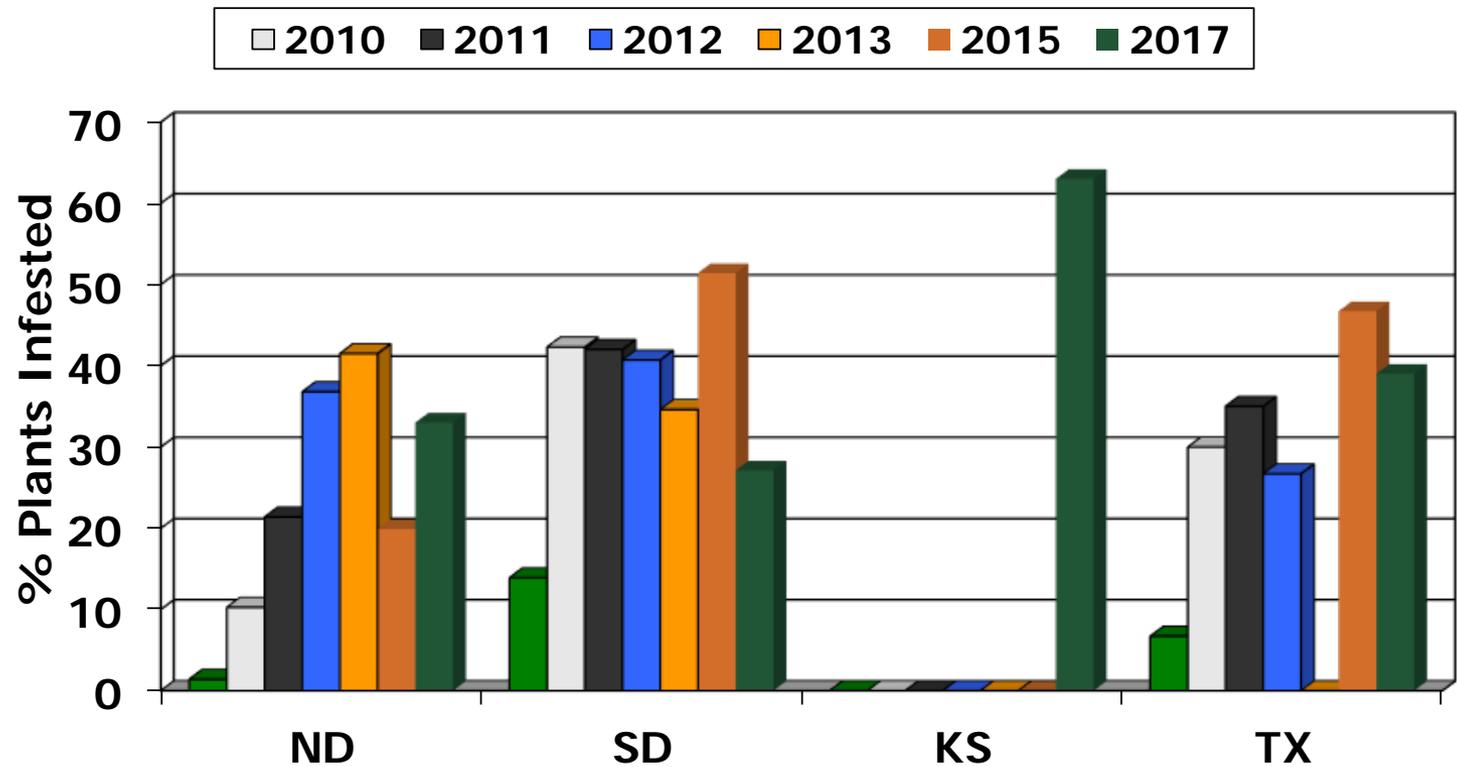
LONG-HORNED BEETLE (*Dectes texanus*)



IN-FIELD INSECT ASSESSMENTS

- **Midge, bud moth, seed maggot all**
 - **Uncommon (< 30% of fields), or**
 - **Low damage (< 5% plants with symptoms)**
- **Stem borer incidence up, severity same...**
- **For ND, SD borers found in more fields in 2015**
- **But % infested stalks similar to 2015**

DECTES BORER SEVERITY 2009-2017

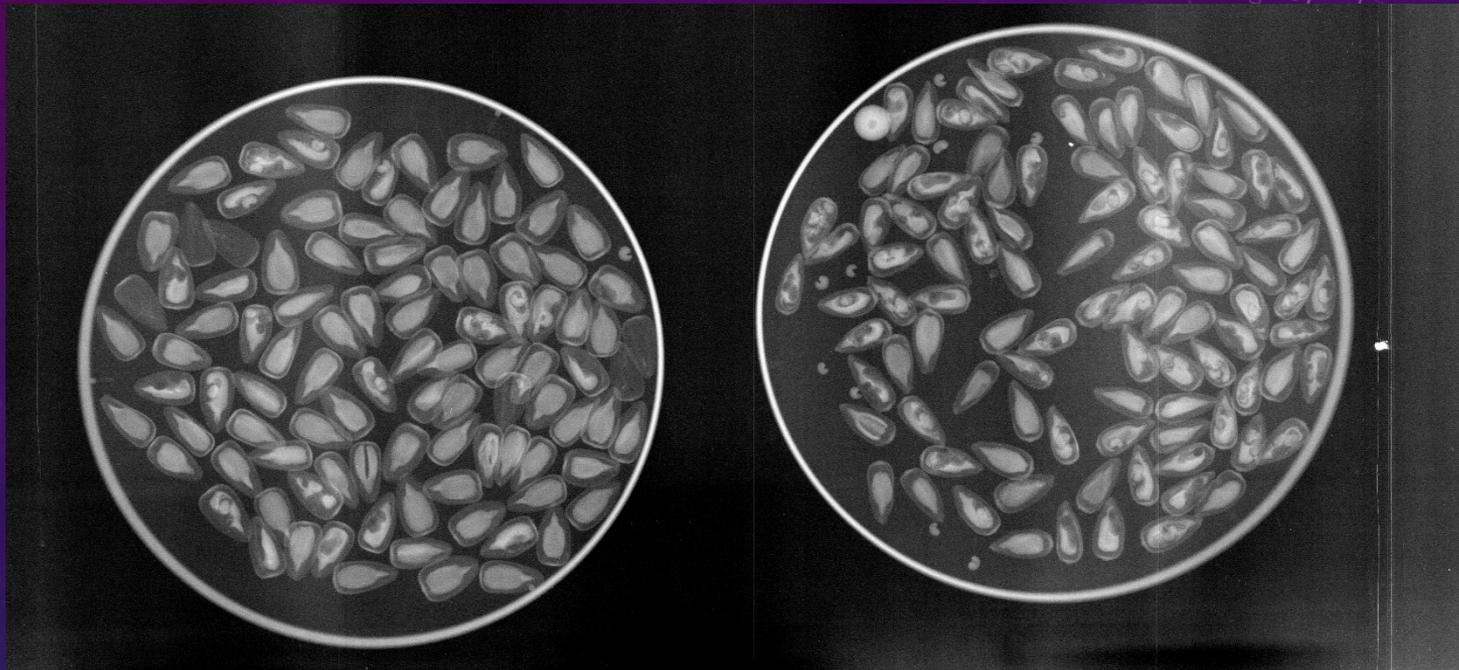


SEED SAMPLES (INSECTS)

- Wedges from 5 heads per field
- Samples X-rayed at USDA-ARS in Fargo, ND
- Scored for % damage of apparently good seed
- ID insect causing most damage in each sample

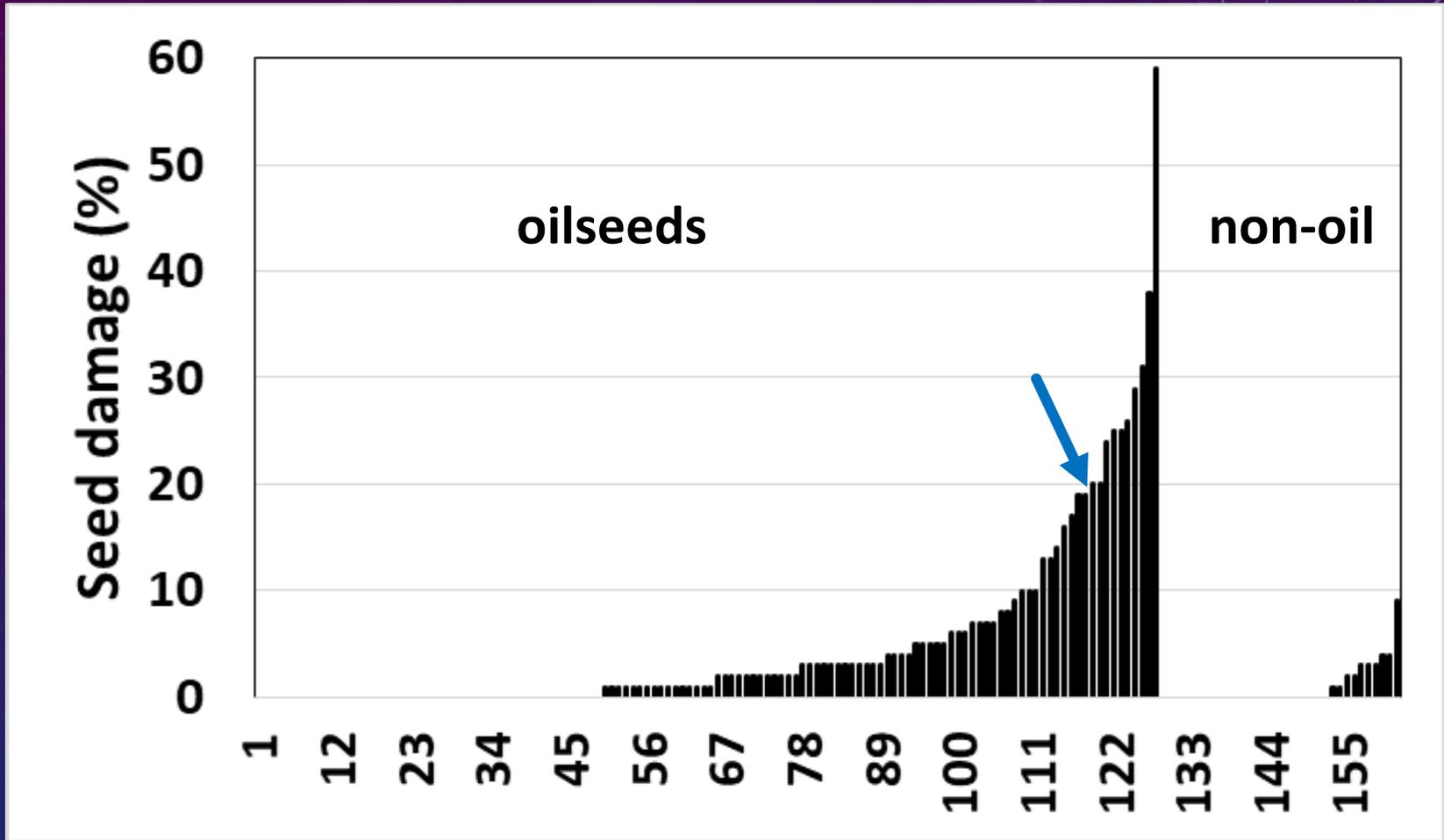


SEED SAMPLES RESULTS - 1



- Red seed weevil #1 (in 46% of 162 samples)
- Non-oil better managed (1% vs 5% damage)
- Few fields (n=12) account for 50+% of damage
- Lygus low in confections, 0–2% (n=34)

SEED SAMPLES RESULTS - 2



- 12 worst RSSW fields, 19-59% weevil damage

SEED DAMAGE – RED SEED WEEVIL

2009-2015

