

USA
Sunflower Survey



*Partnership of
University, USDA & Industry*

2006
National
Sunflower
Association

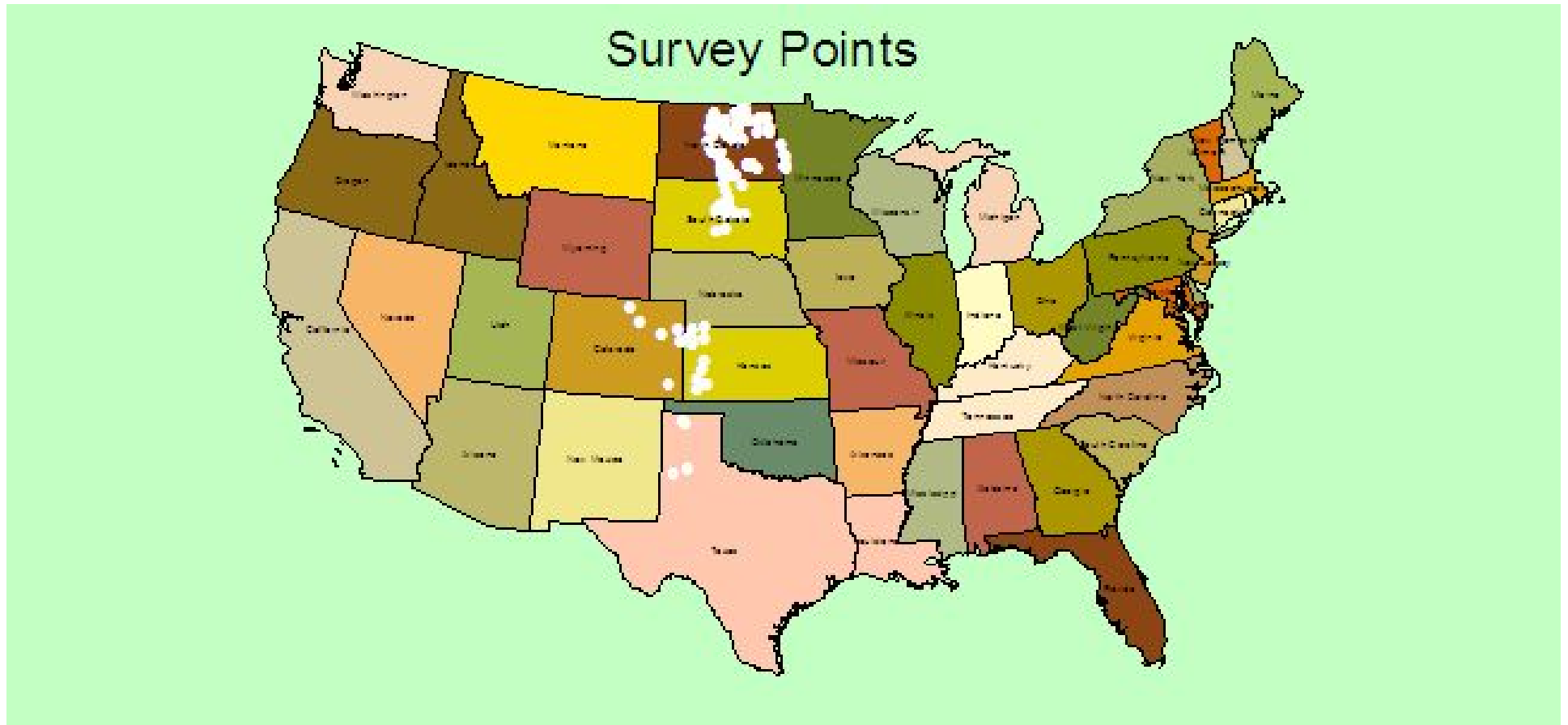
Survey

Project Leader:

Dr. Duane R. Berglund, NDSU Extension
Agronomist and Professor of Crop Science

Maps and Survey Points:

Courtesy of: Dr. Jan Knodel, NDSU Extension Entomologist



2006 Crop Survey Teams



North Dakota

Terry Gregoire, Scott Knoke, &
Duane Berglund

Greg Endres, Larry Charlet
& Theresa Gross

Jerry Miller, Dale Rehder, Lindsey
Strand

Larry Kleingartner, Roger Ashley

Counties (31)

Benson, Pierce, McHenry, Towner
(North Central)

Foster, Wells, Eddy, Sheridan
(Central)

Barnes, Stutsman, Logan, Kidder
(SEC)

Burleigh, McLean, Mercer, Hettinger
Grant
(WC)

2006 Crop Survey Teams



North Dakota

Kent McKay & Denise Markle

Jan Knodel, Tom Gulya, Scott Radi

Max Dietrich, Cal Thorson

Minnesota

Phil Glogoza & Carl Bradley

Counties (31)

Bottineau, Renville, Ward **(NW)**

Grand Forks, Nelson, Walsh
Cavalier, Ramsey **(NE)**

Emmons, McIntosh, Sioux, Adams
Stark in ND and Perkins, SD.
(SC and SW)

Counties (2)

Norman, Polk

Crop Survey Teams



South Dakota

Dale Curtis

Bob Fanning

Lee Gilbertson

Kathy Grady

Terry Hall

Mark Rosenberg

Chuck Todd

David Vander Viet

Tom Young

Counties (10)

Campbell

Edmunds

Faulk

Hand

Hughes

Hyde

Lyman

McPherson

Potter

Sully

Walworth



Crop Survey Teams

Colorado

Ron Meyer, Area Agronomist, CSU
Extension, Burlington, CO

Counties (6)

Kit Carson, Cheyenne, Adams,
Kiowa, Logan,
Lincoln, Baca, & Weld

Kansas

Jeanne Falk, Area Crops Specialist,
KSU Extension, Colby, KS

Counties (9)

Finney, Grant, Haskell,
Sherman, Stevens, Logan
Thomas, Cheyenne

Texas

Calvin Trostle, Extension
Agronomist, Texas A&M,
Lubbock, TX

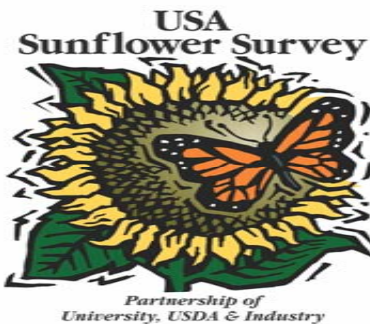
Counties (6)

Deaf Smith, Lamb, Hartley,
Floyd, Cochran, Dallam



2006 Sunflower Survey

- Only counties with 20,000 planted Acres or more
- One field stop per 10,000 Acres
- Fields Surveyed in 2005- 146
- Fields Surveyed in 2006 - 162



2006 Sunflower Survey- # Fields

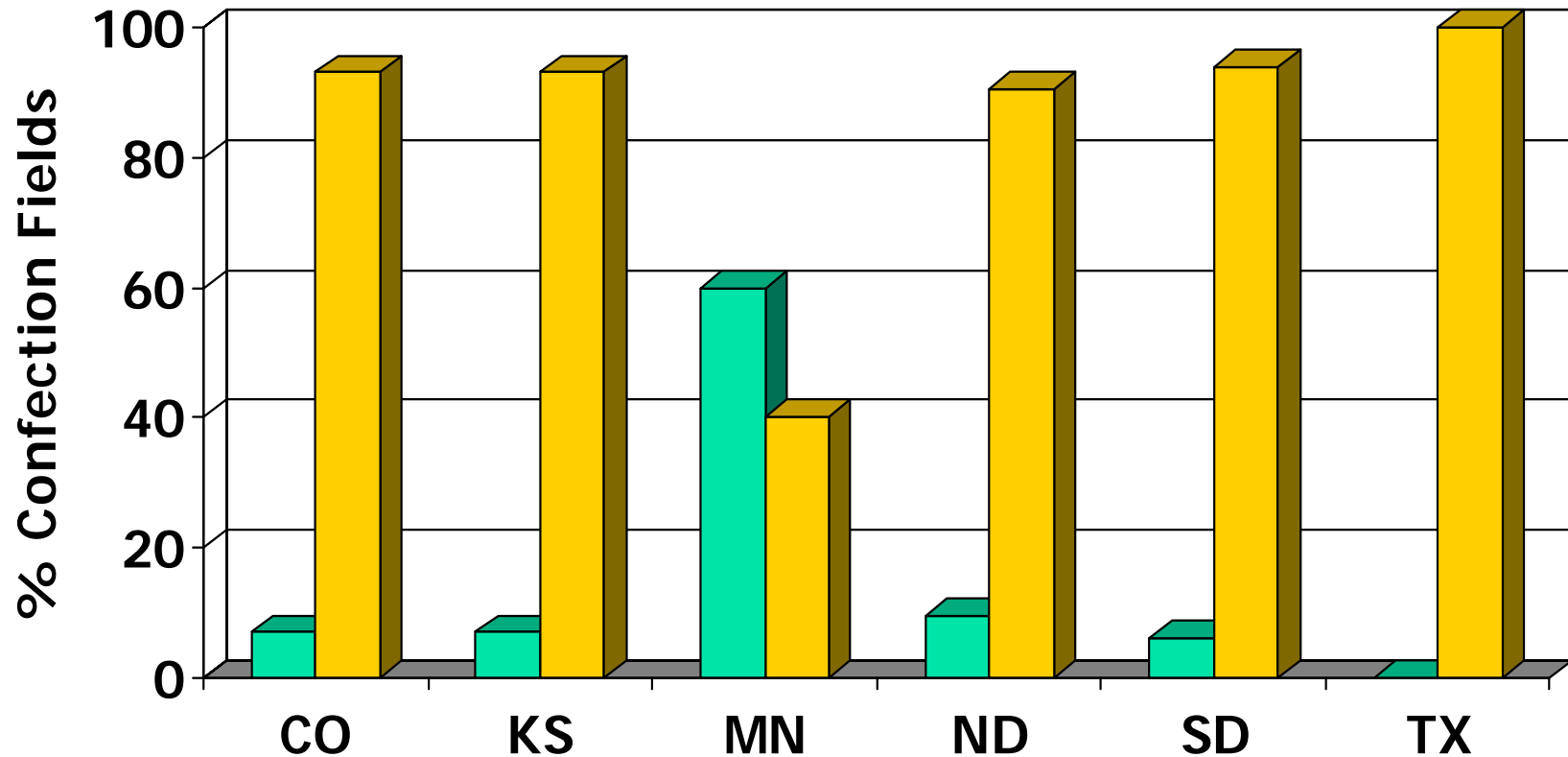
- North Dakota-84
- Minnesota-10
- South Dakota-34
- Kansas-15
- Colorado-13
- Texas-6

- **TOTAL-162 Fields**

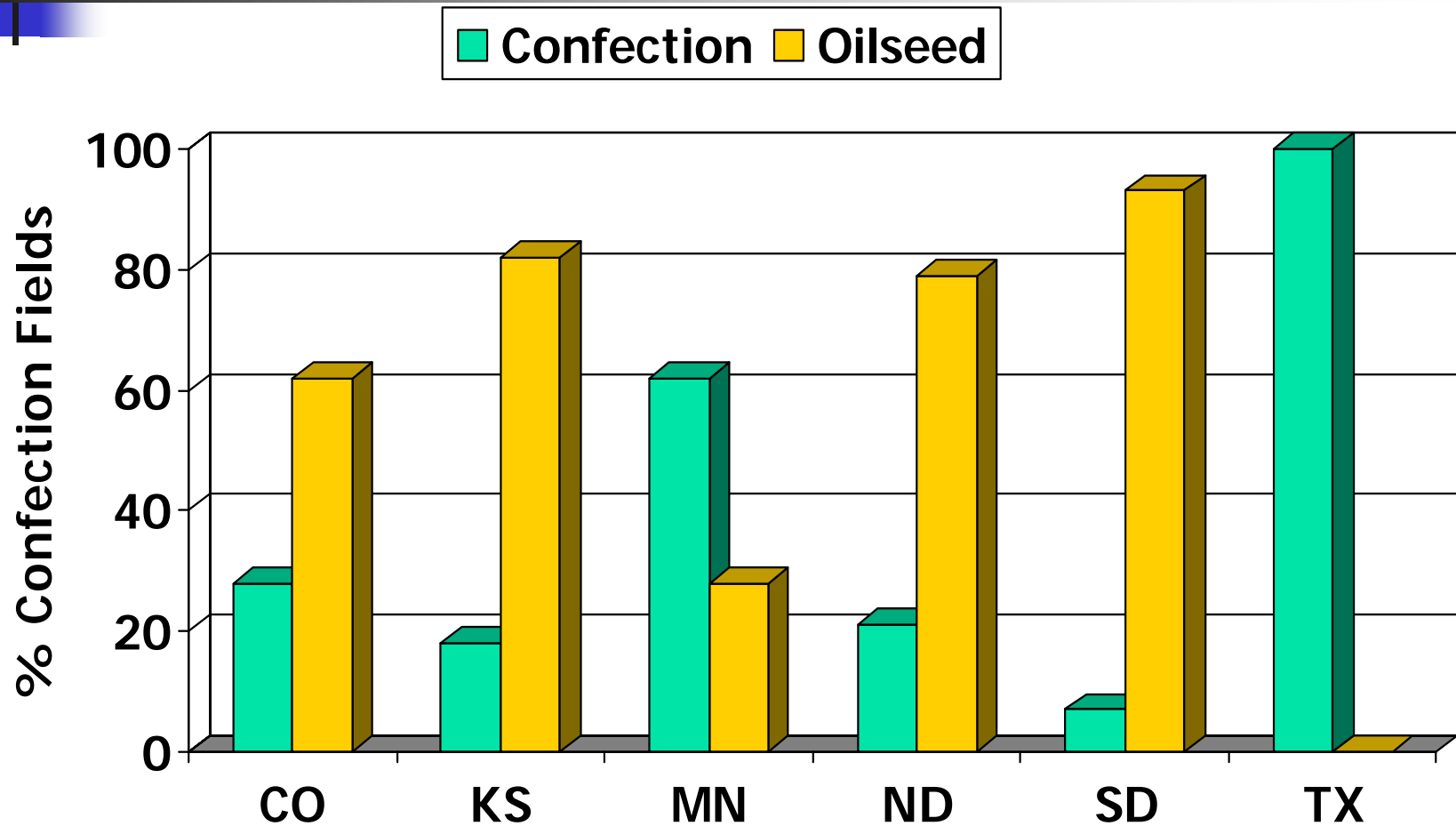


Confection and Oilseed Sunflower-2006 Survey

■ Confection ■ Oilseed

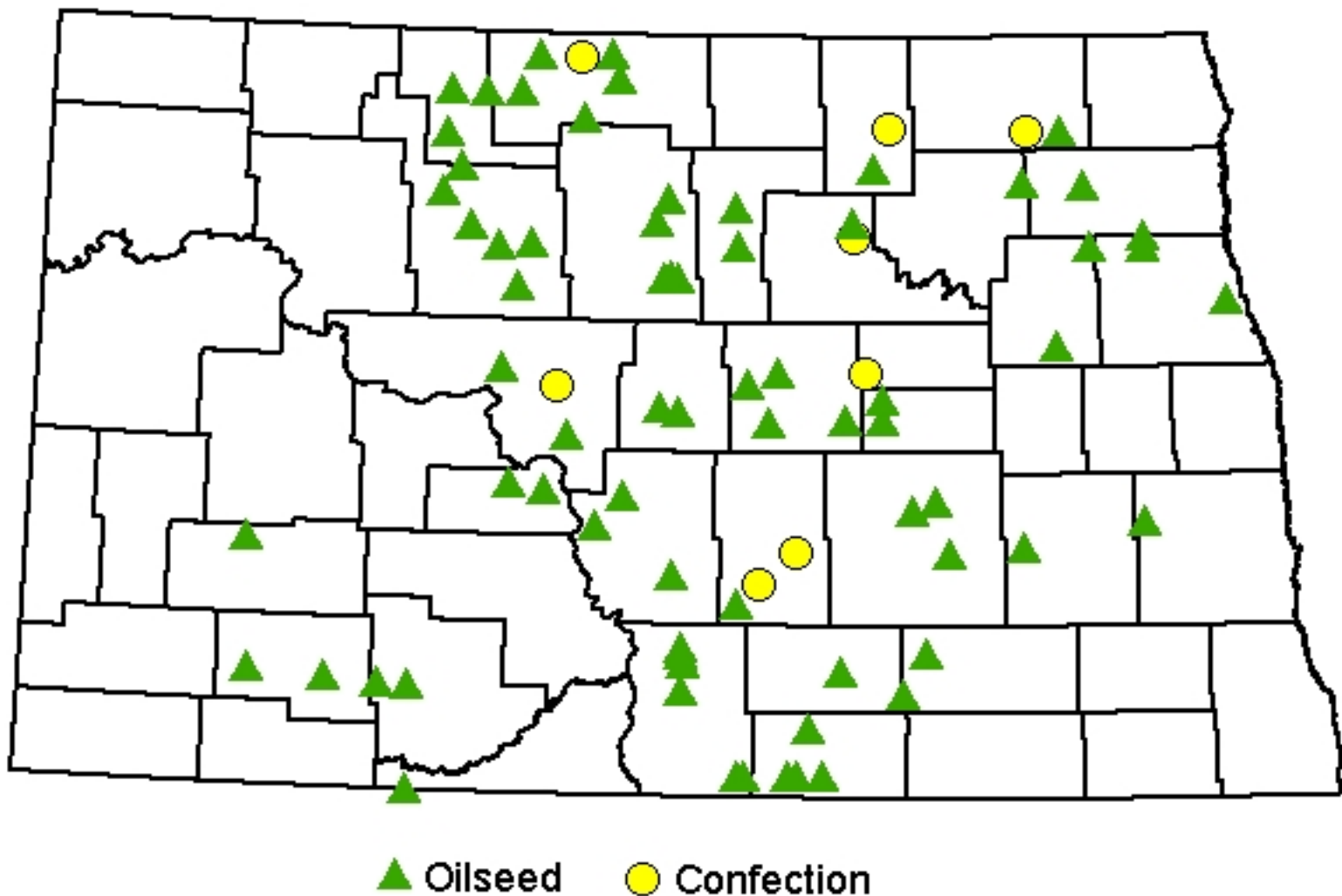


Confection and Oilseed Sunflower-2005 Survey

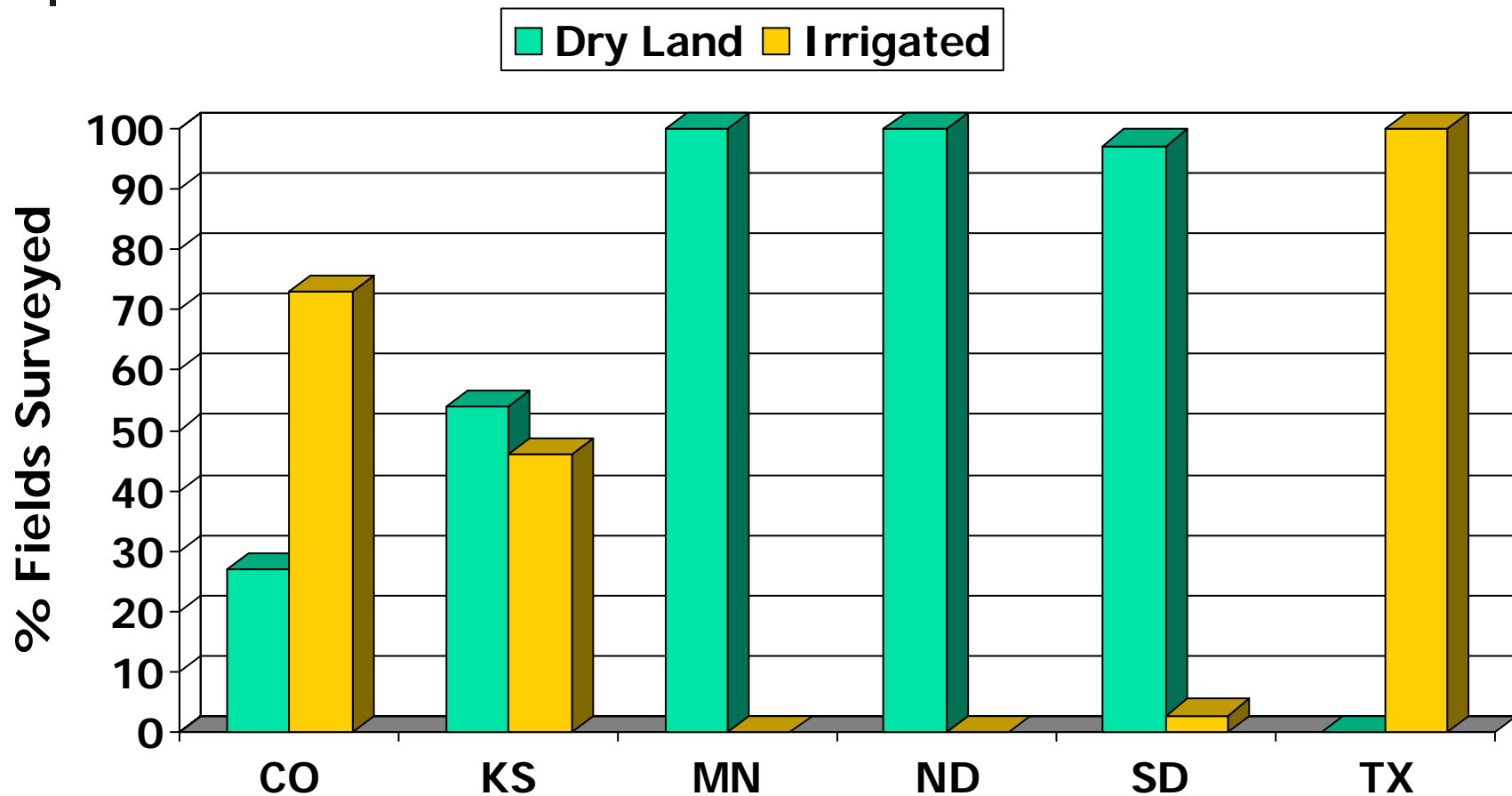


2006 Sunflower Survey

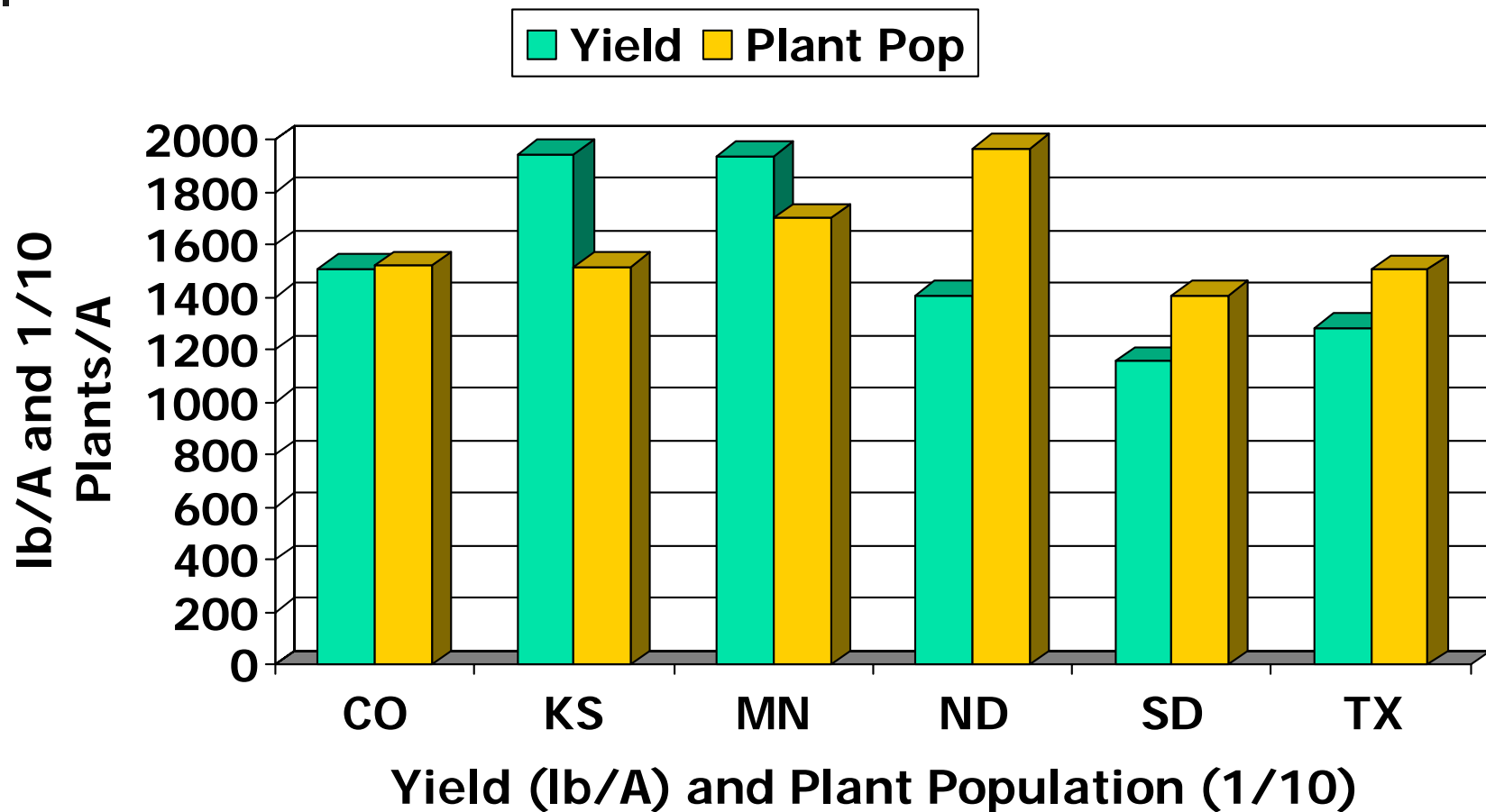
Oilseed or Confection Sunflowers



Sunflower: DryLand or Irrigated-2006

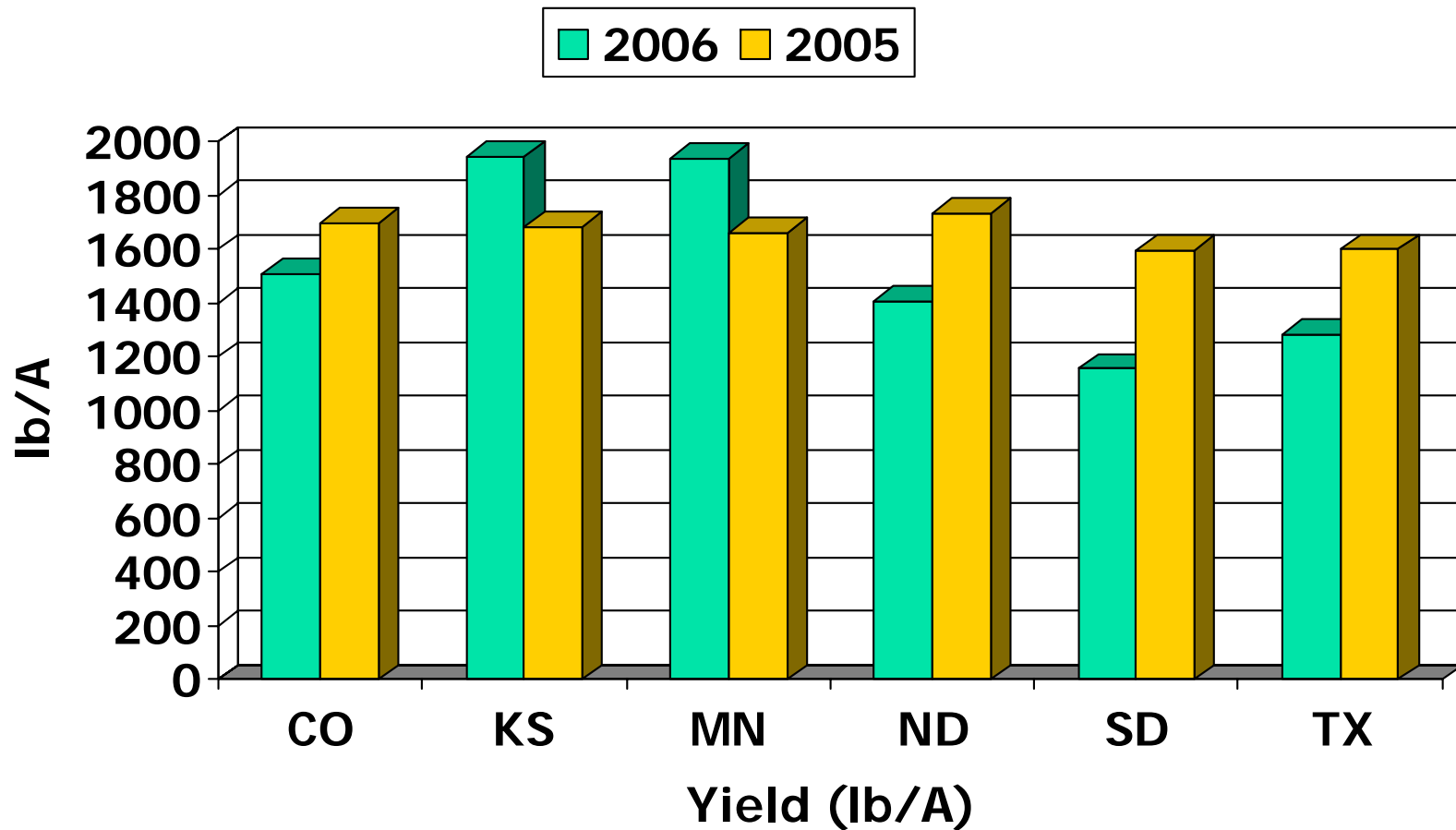


Sunflower Yield and Plant Population: 2006



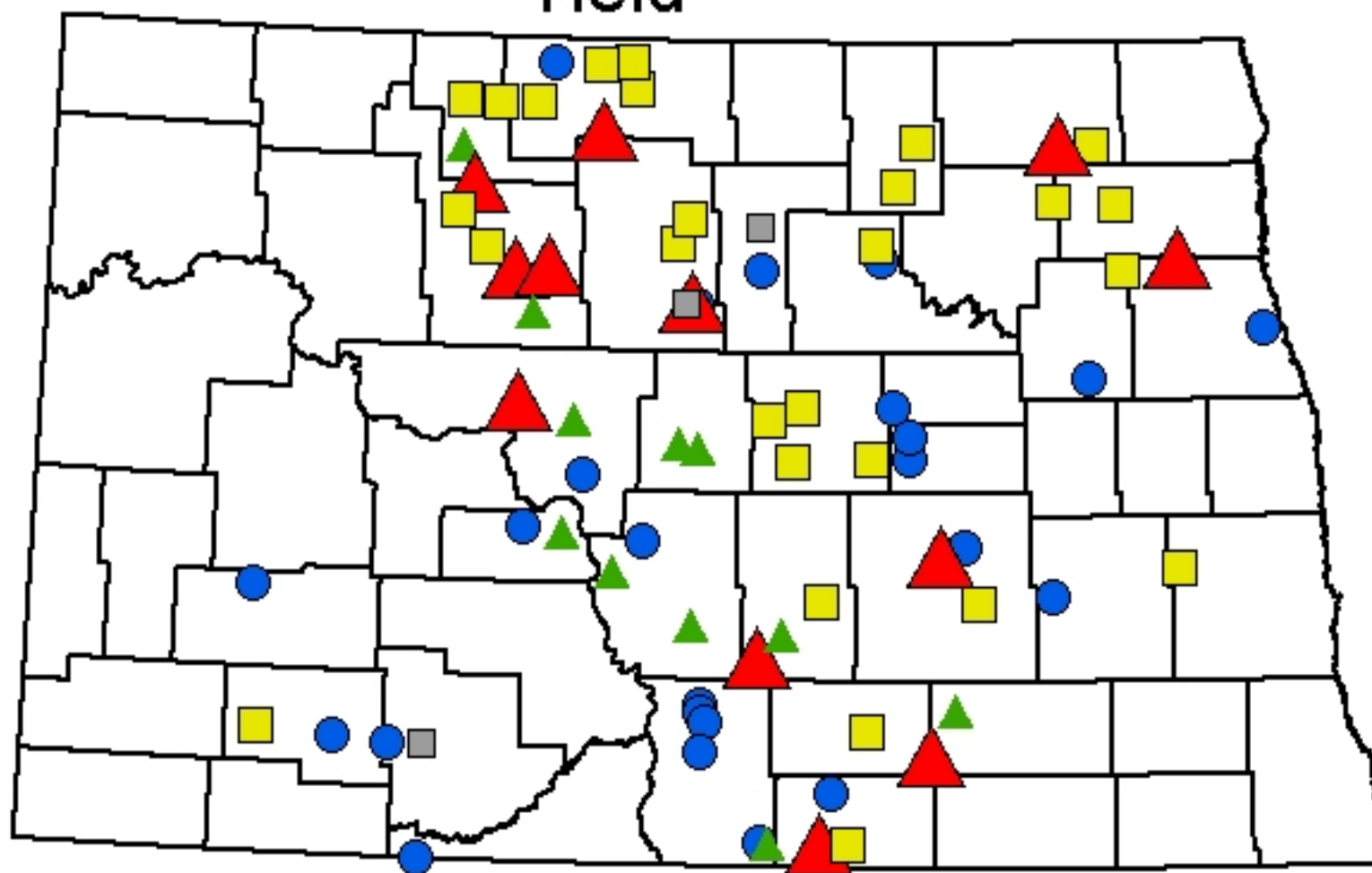
Sunflower Yield : Lbs/A

2005 vs: 2006

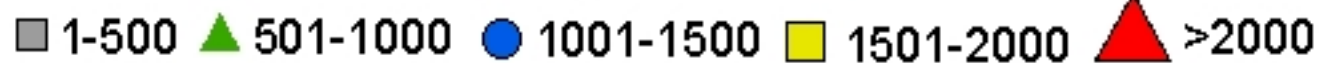


2006 Sunflower Survey

Yield

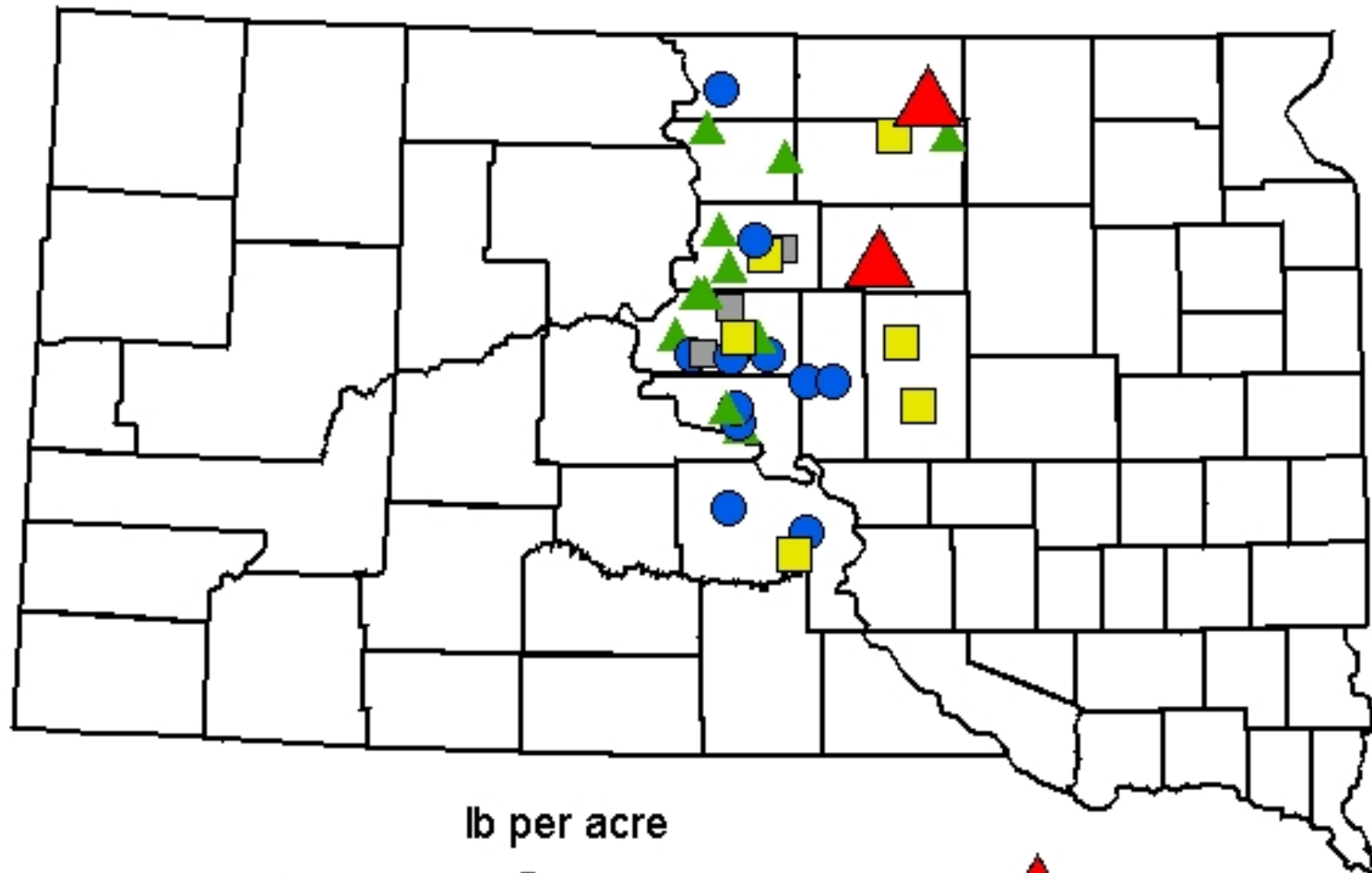


lb per acre



2006 Sunflower Survey

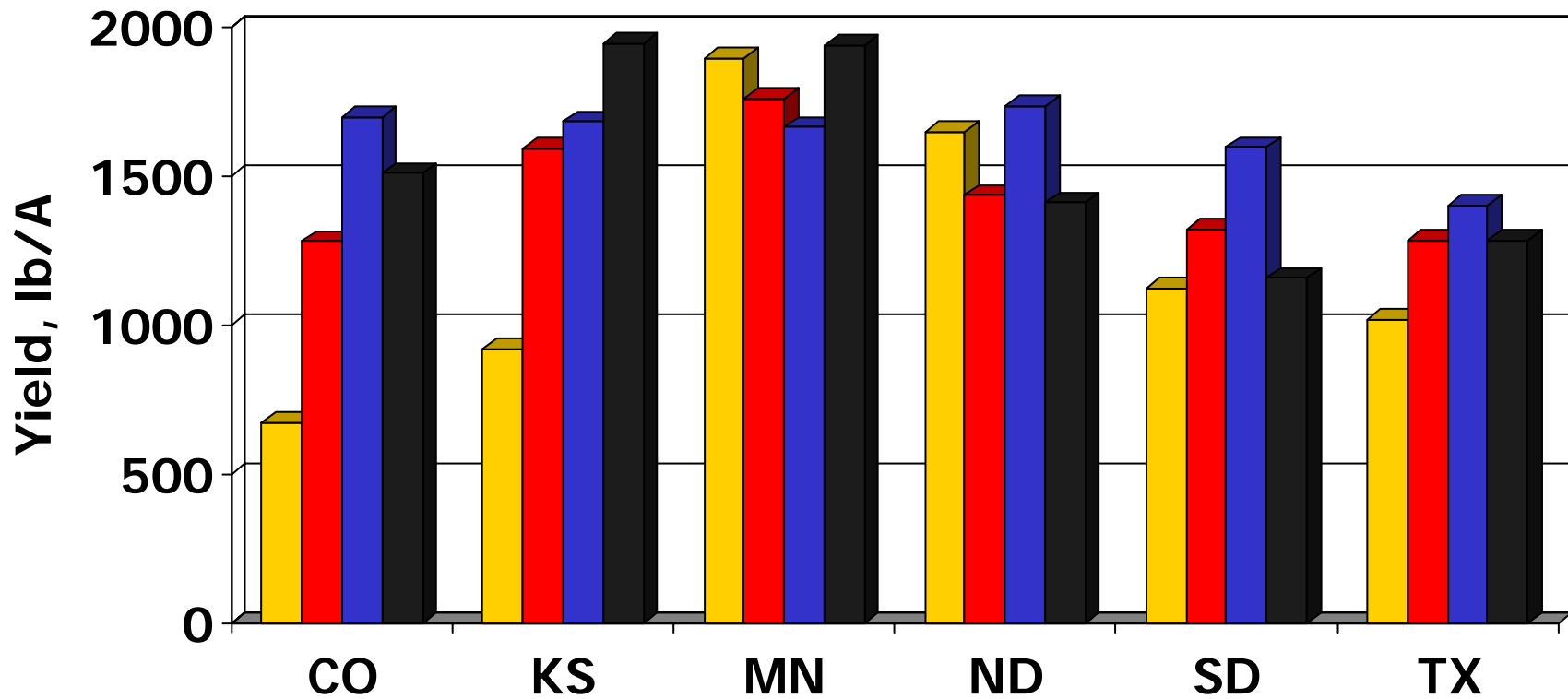
Yield



■ 1- 500 ▲ 501-1000 ● 1001-1500 ■ 1501-2000 ▲ >2000

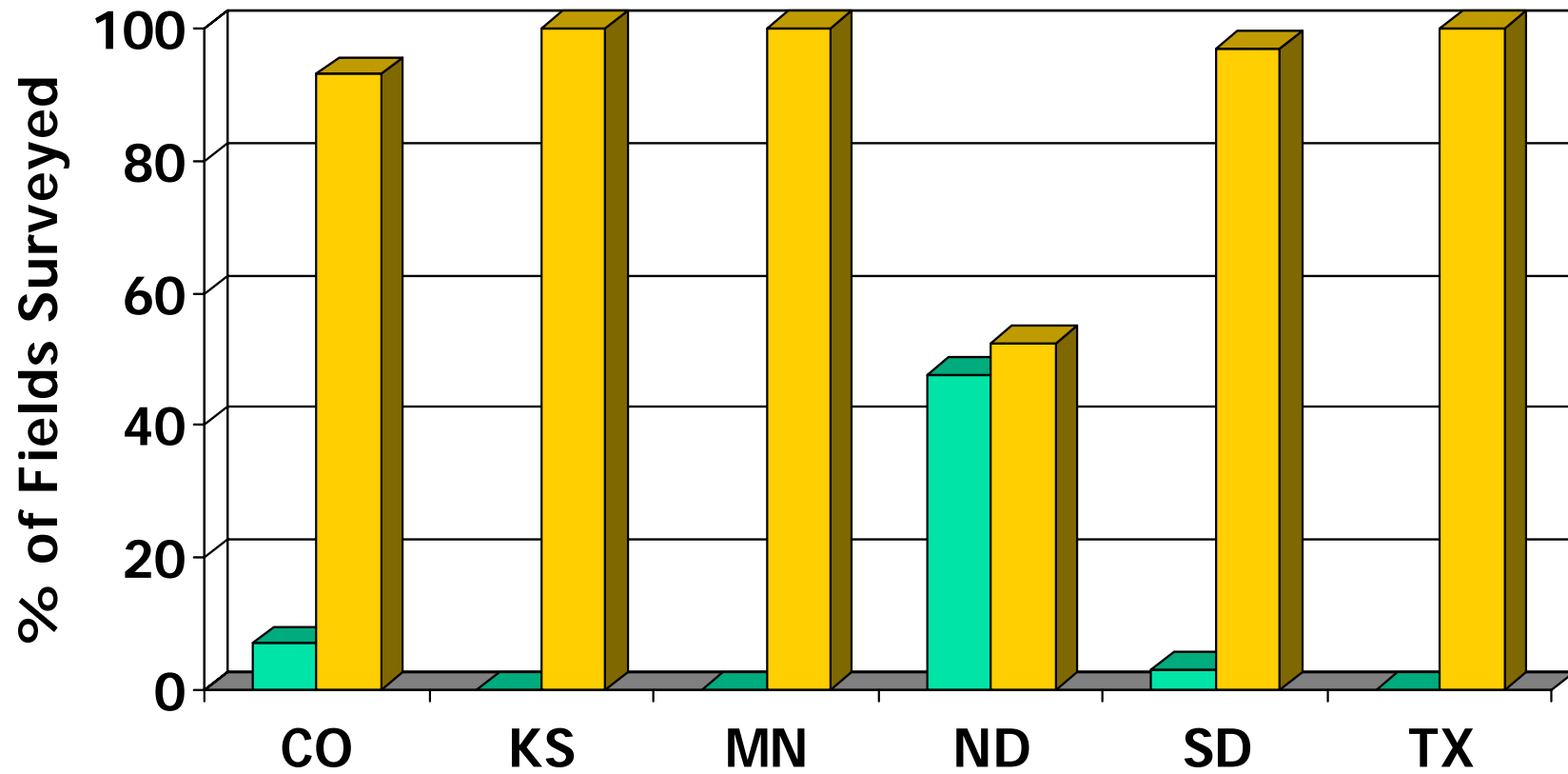
Yields, 2002-2006

2002 2003 2005 2006



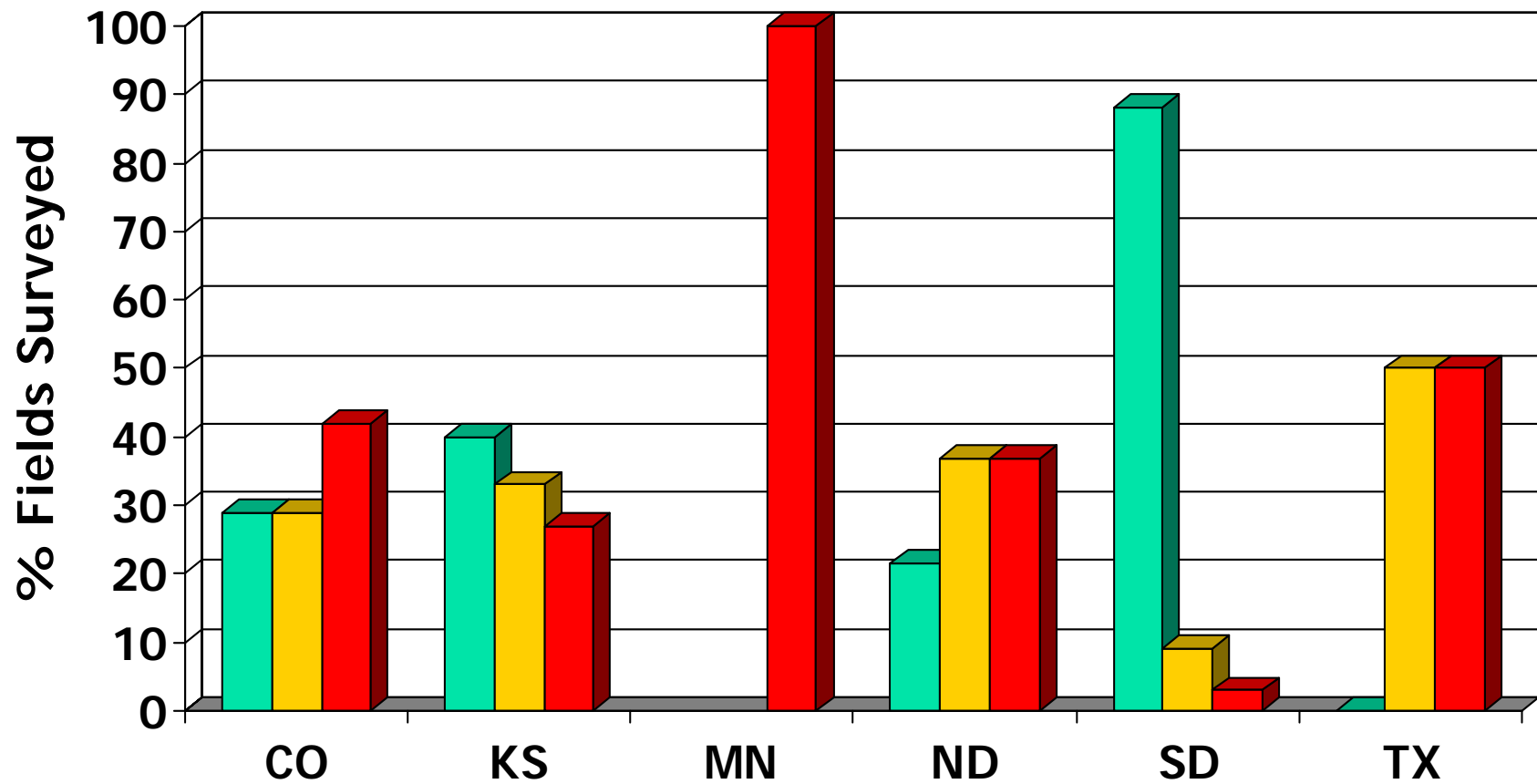
Row Spacing Sunflowr-2006

-20 inches +20 inches



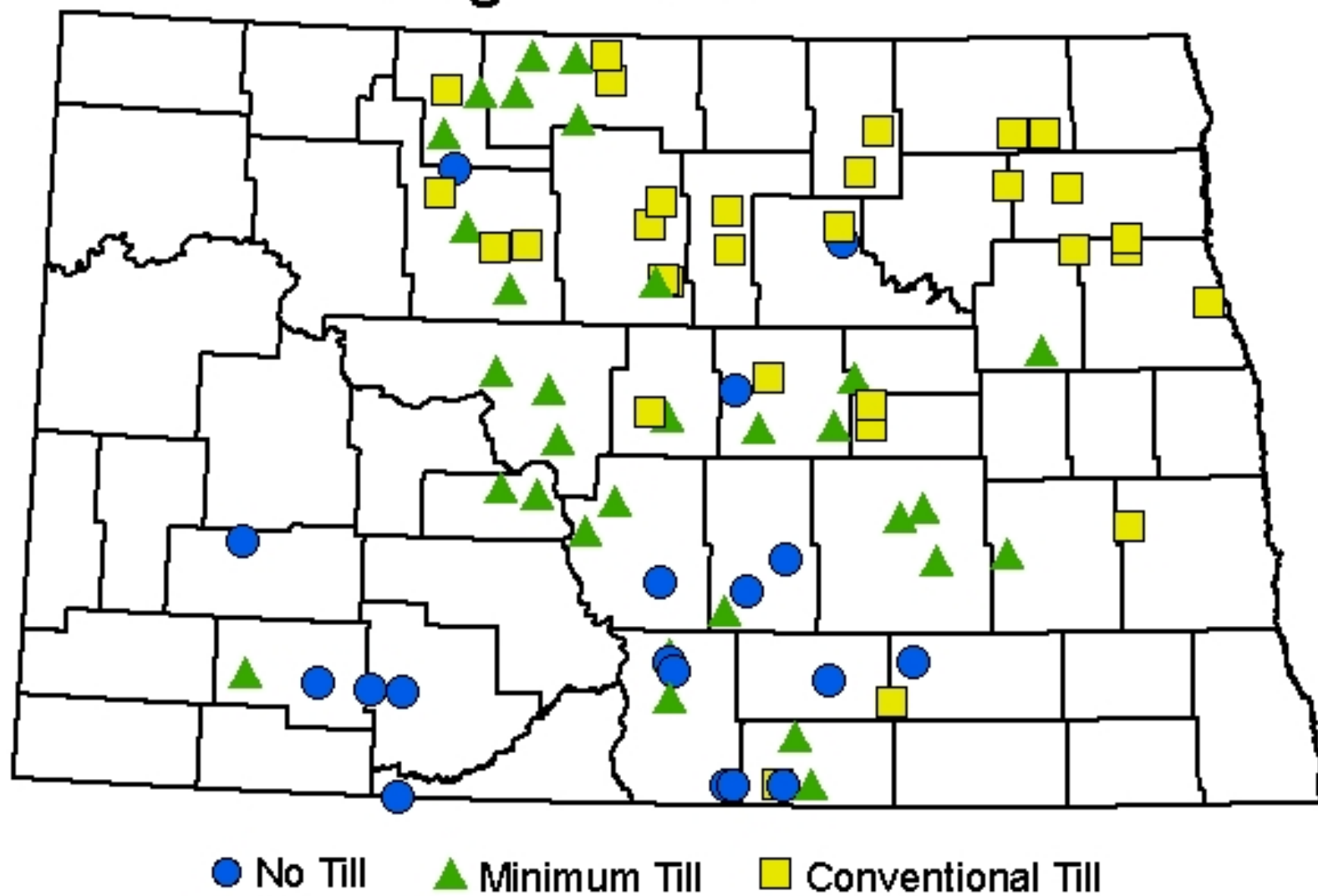
Tillage: 2006 Sunflower Survey

no till min till conv till



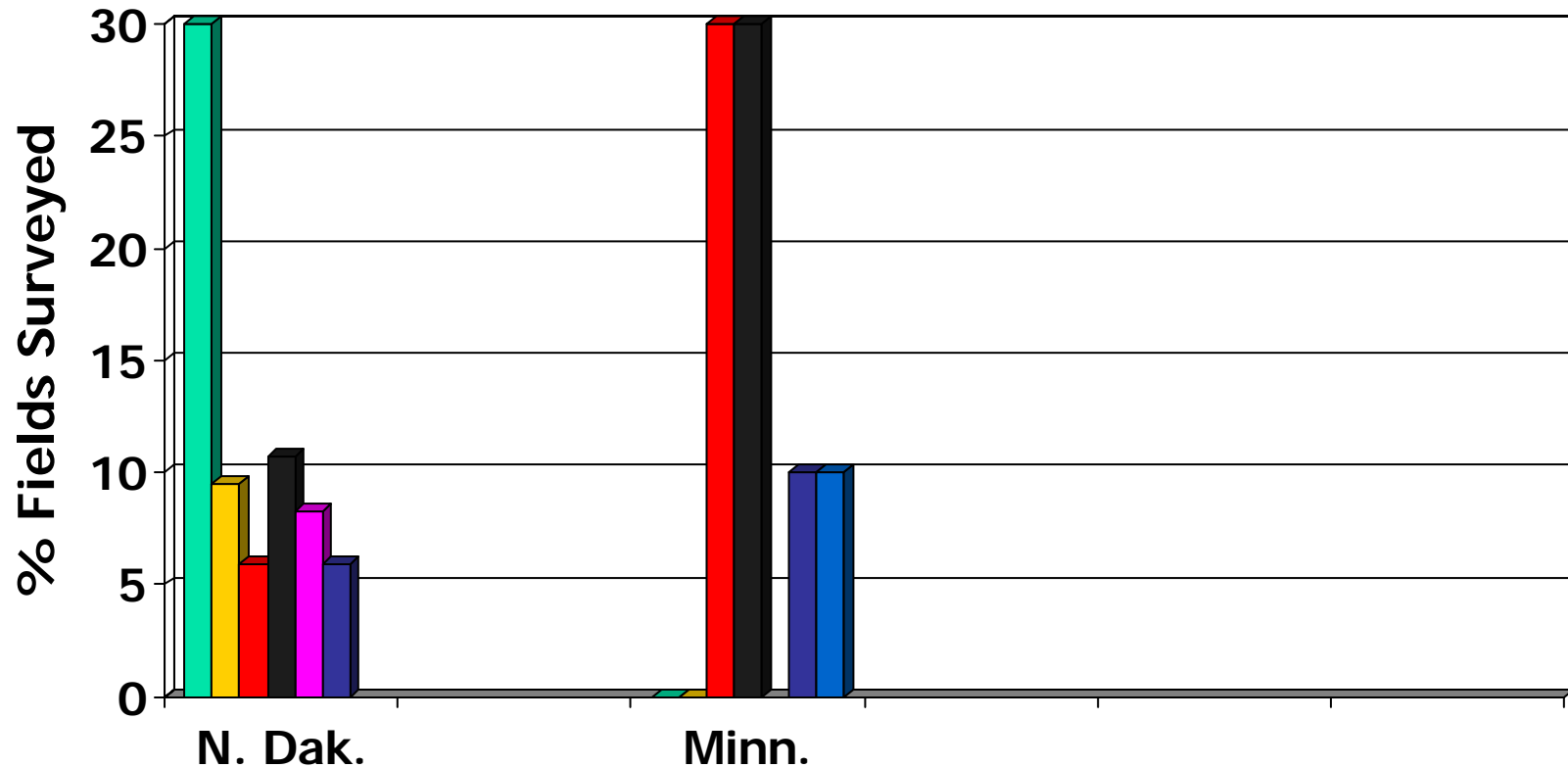
2006 Sunflower Survey

Tillage Practices

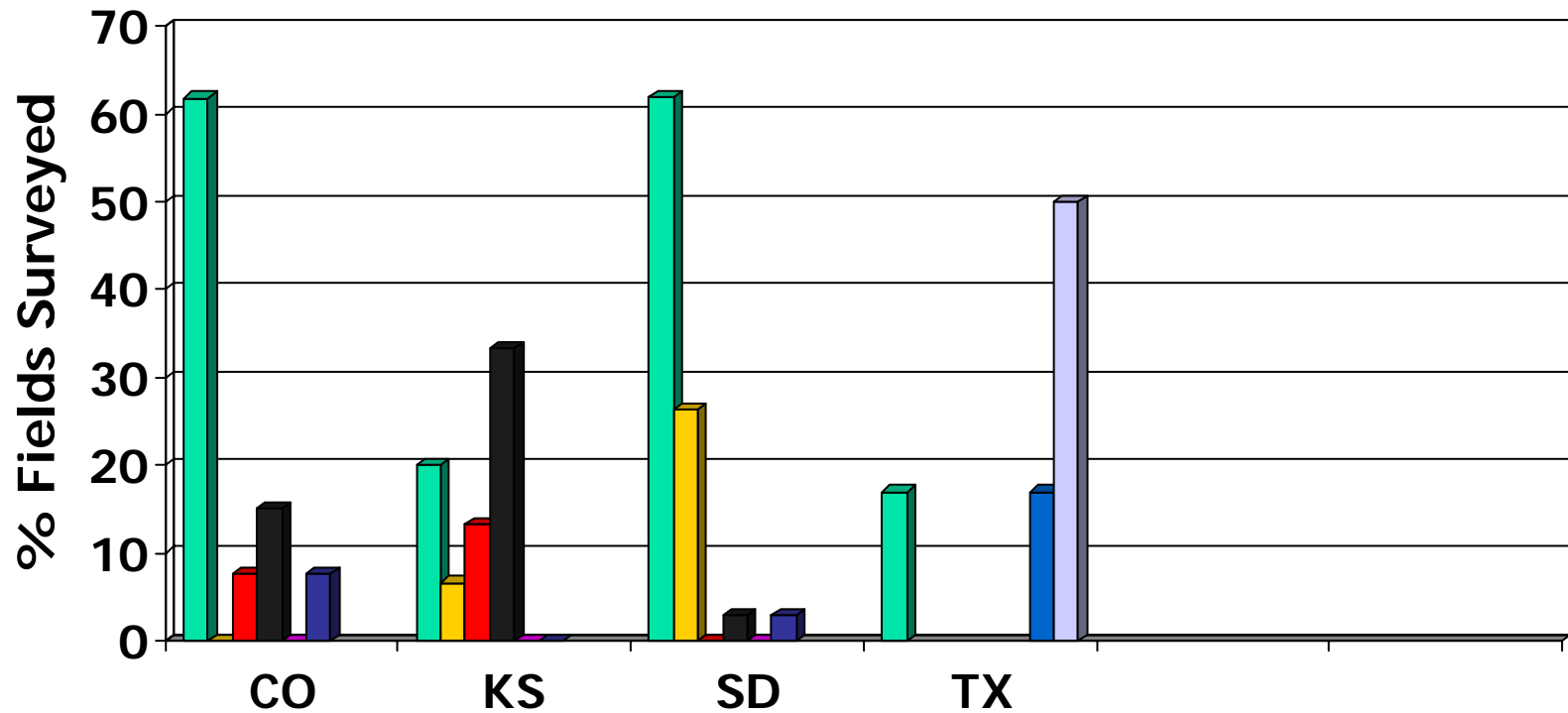
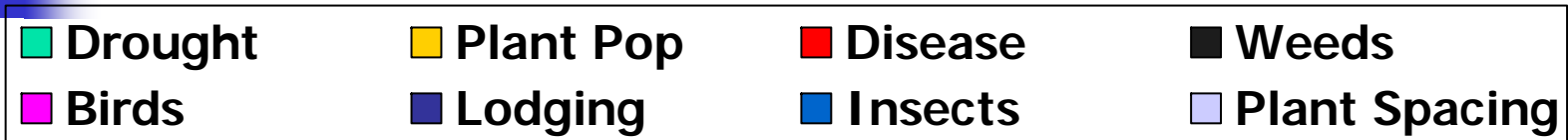


Number One Yield Limiting Factors-2006

■ Drought ■ Plant Pop ■ Disease ■ Weeds ■ Birds ■ Insects ■ Lodging

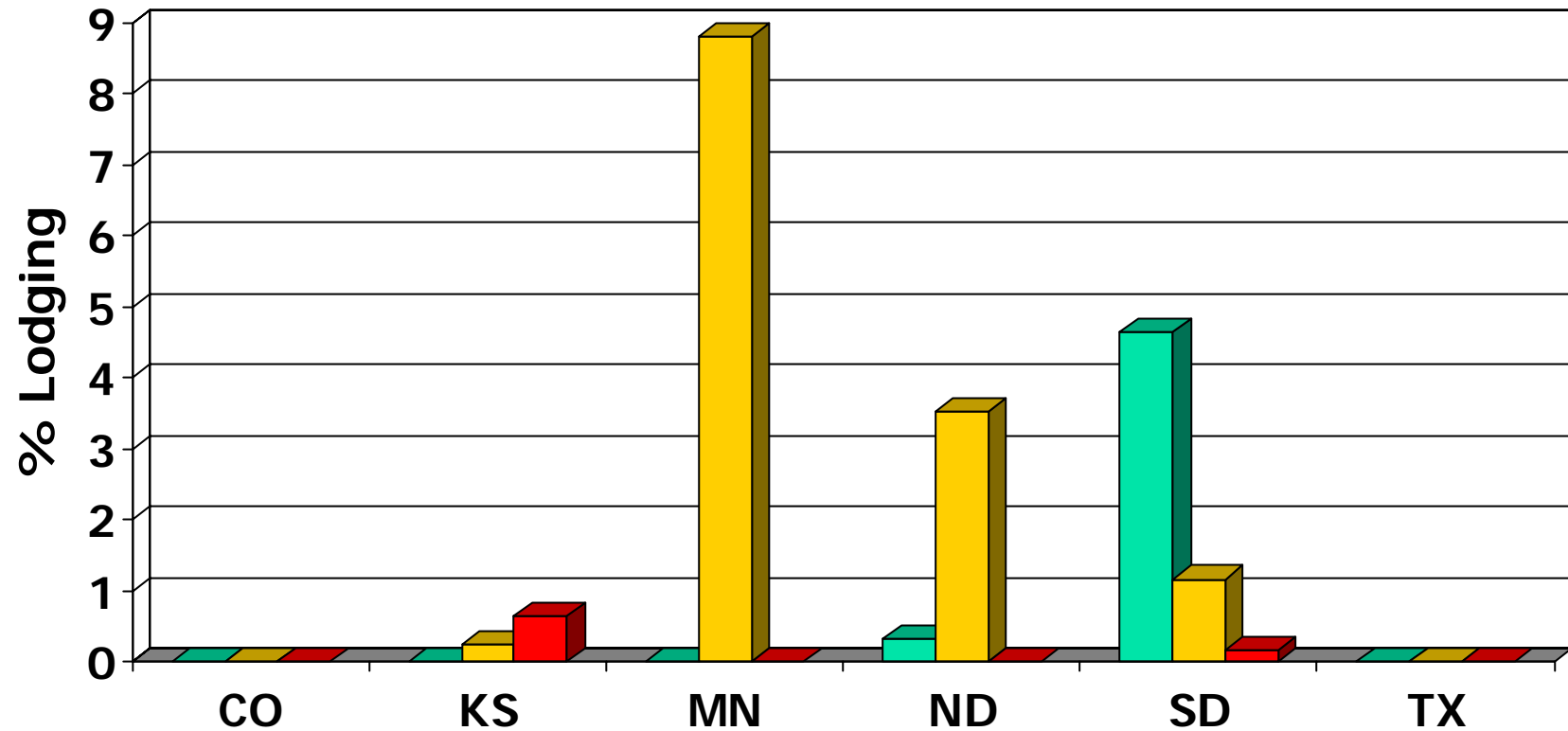


Number One Yield Limiting Factors-2006



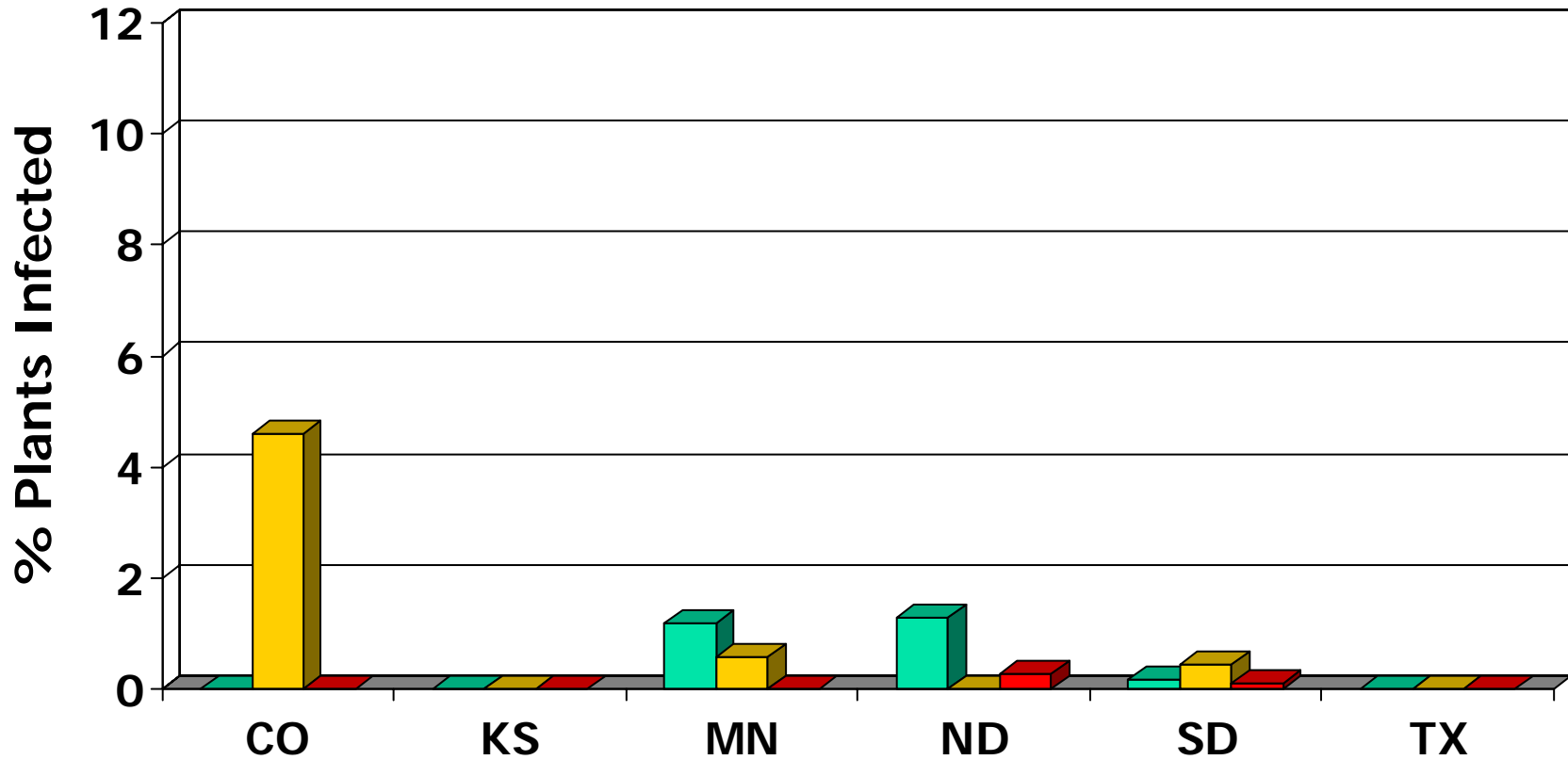
Lodging: 2006

■ Root Uphvd ■ Ground ■ Mid Stalk



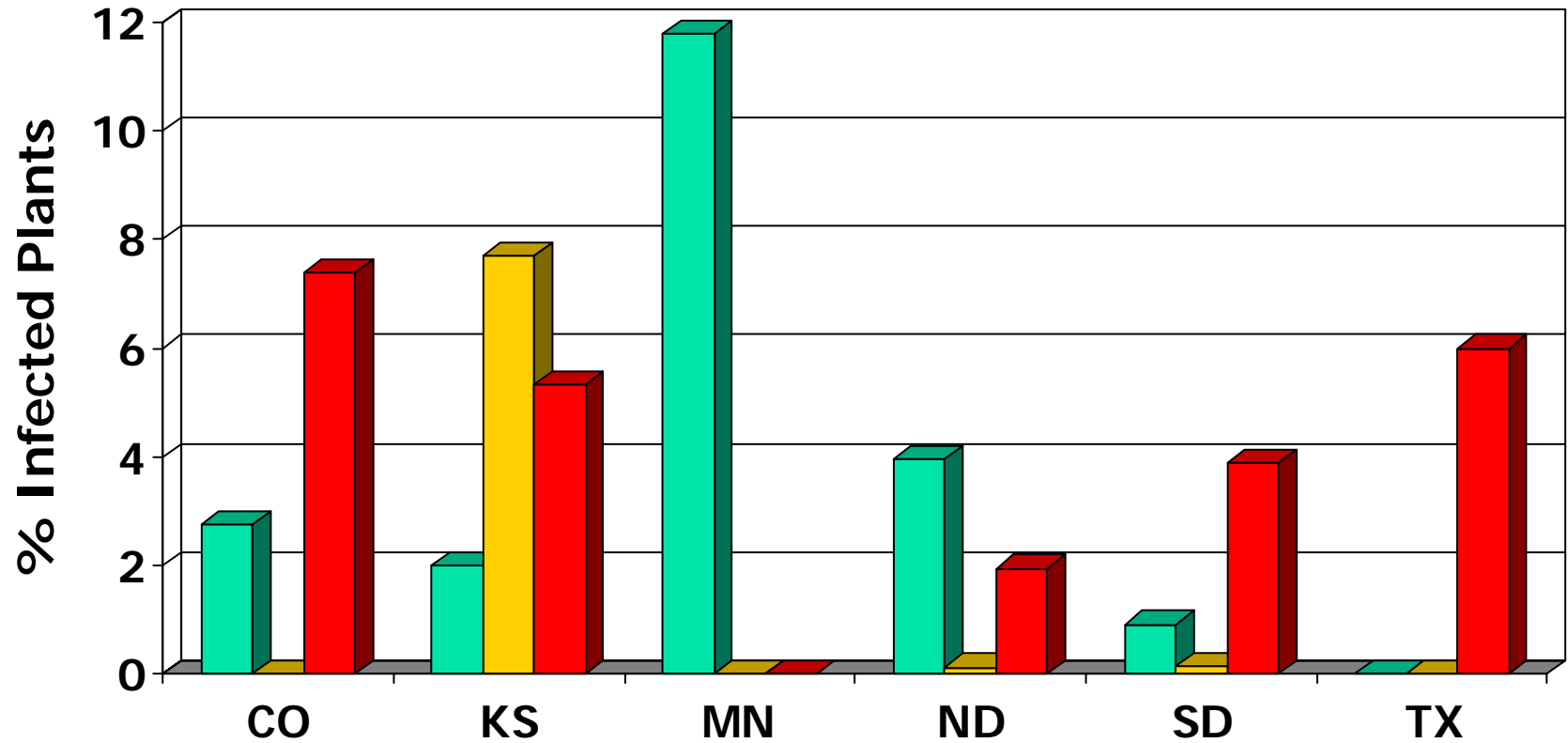
Disease: Sclerotinia- 2006

■ Wilt ■ Head Rot ■ Mid Stalk

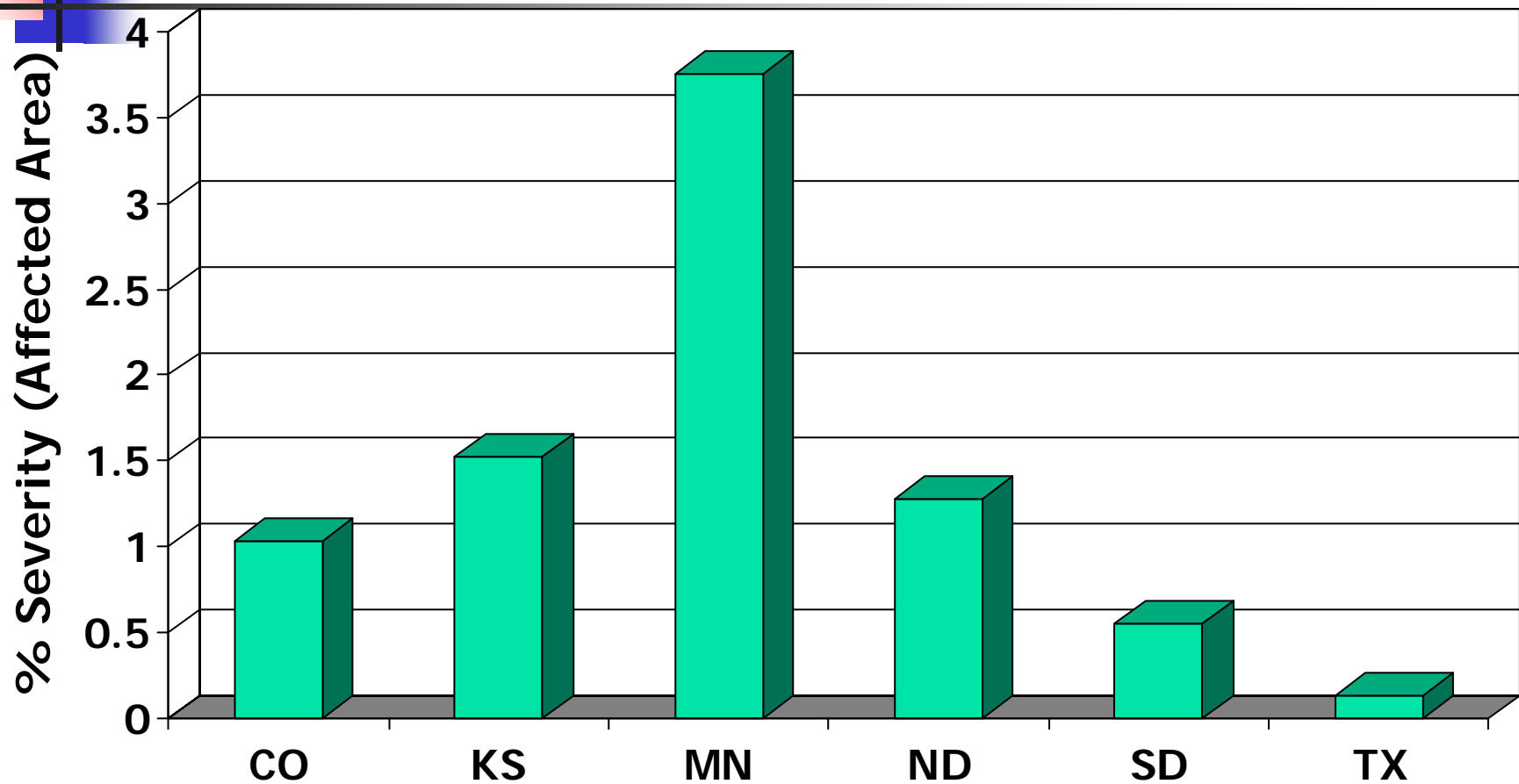


Other Diseases- 2006

■ Phomopsis ■ Verticillium ■ Rhizopus



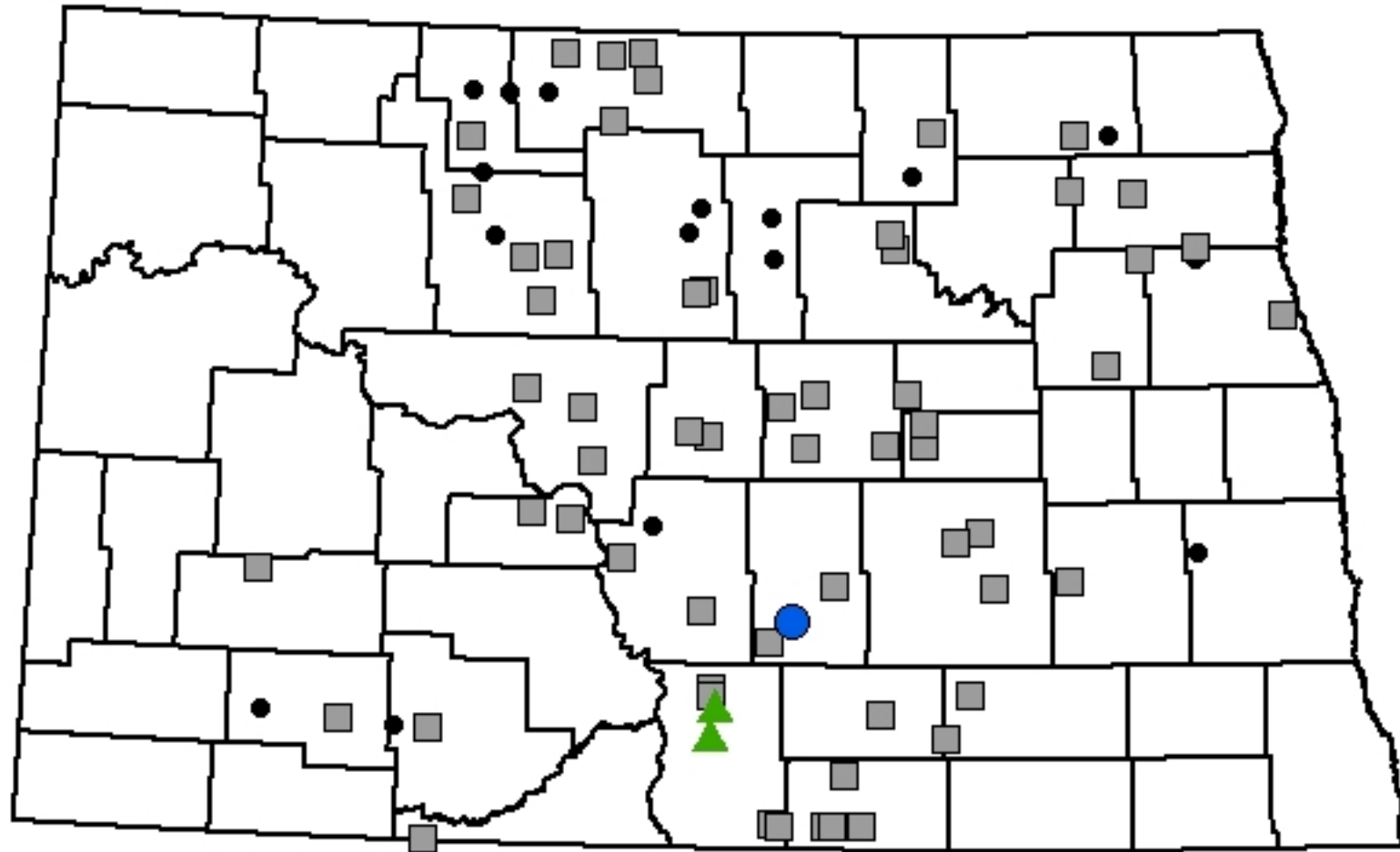
Red Rust in Sunflower- 2006



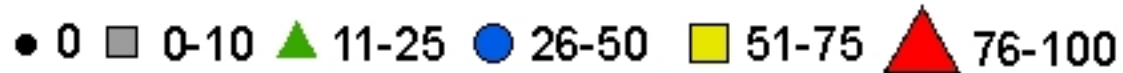
Rust Severity Estimated for Fields Where Incidence Reported

2006 Sunflower Survey

Red Rust

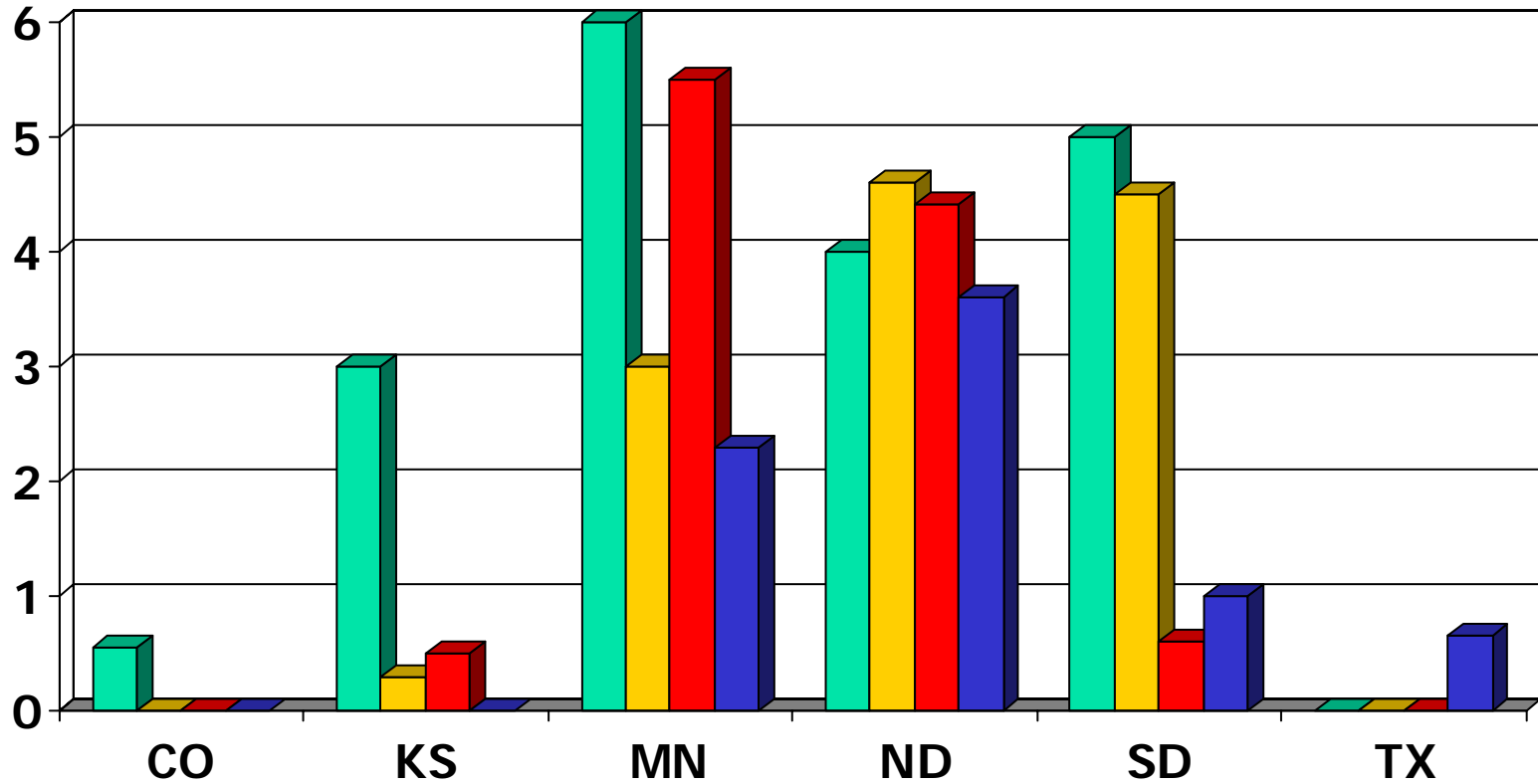


Percent Incidence



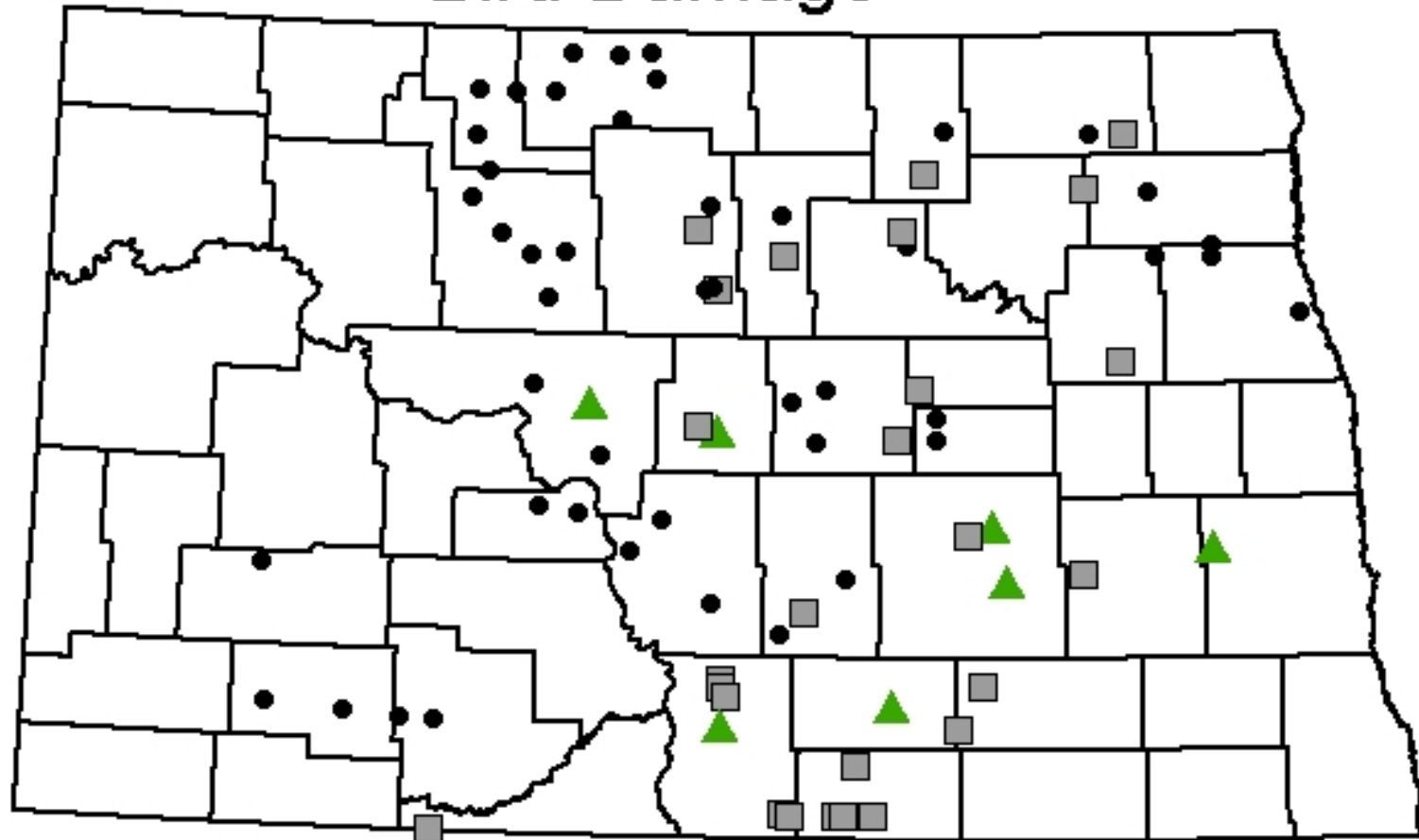
Bird Damage 02,03, 05 & 06

2002 2003 2005 2006

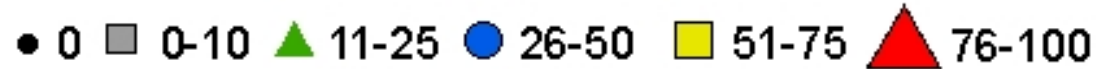


2006 Sunflower Survey

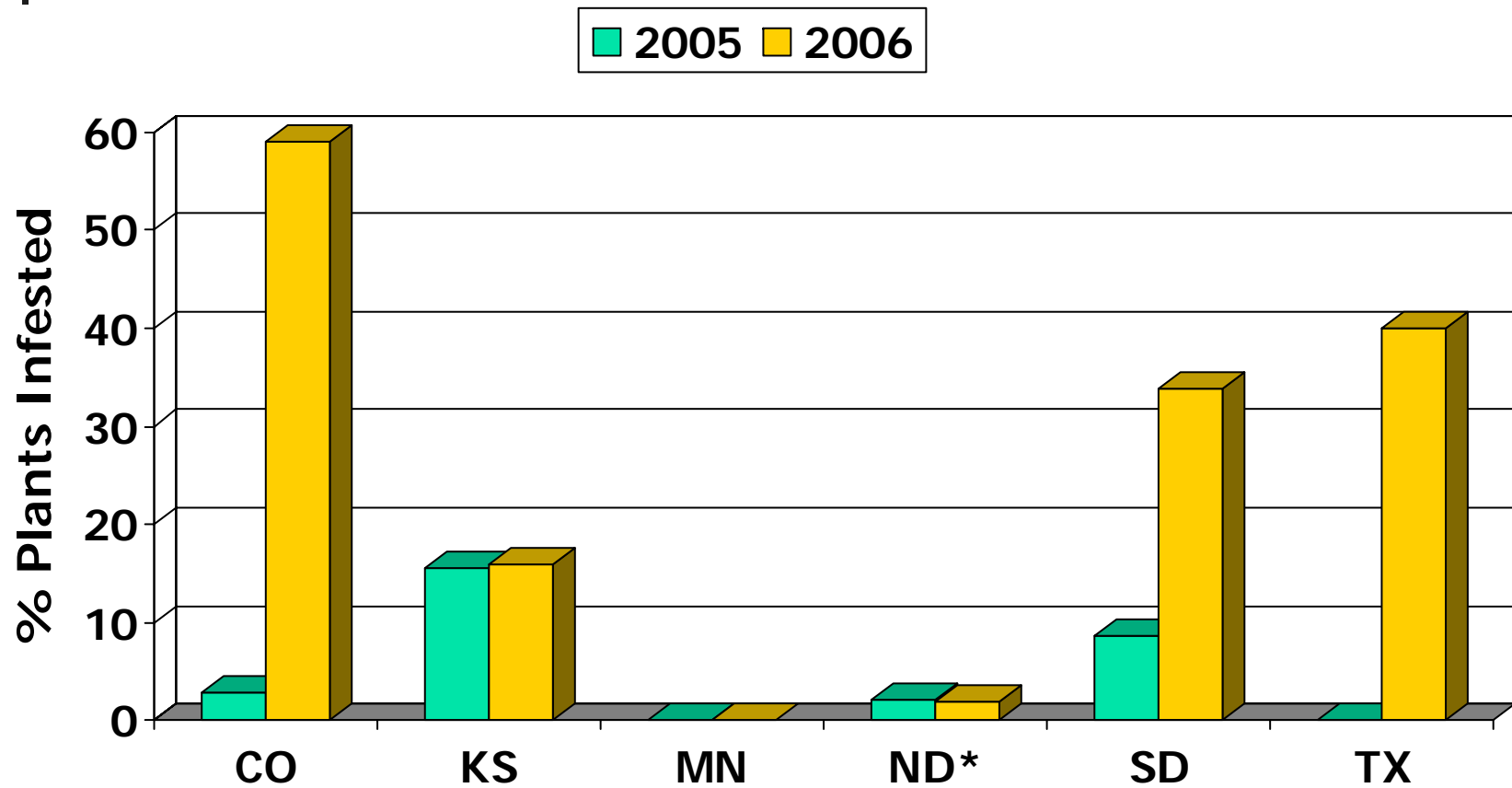
Bird Damage



Percent Seed Loss

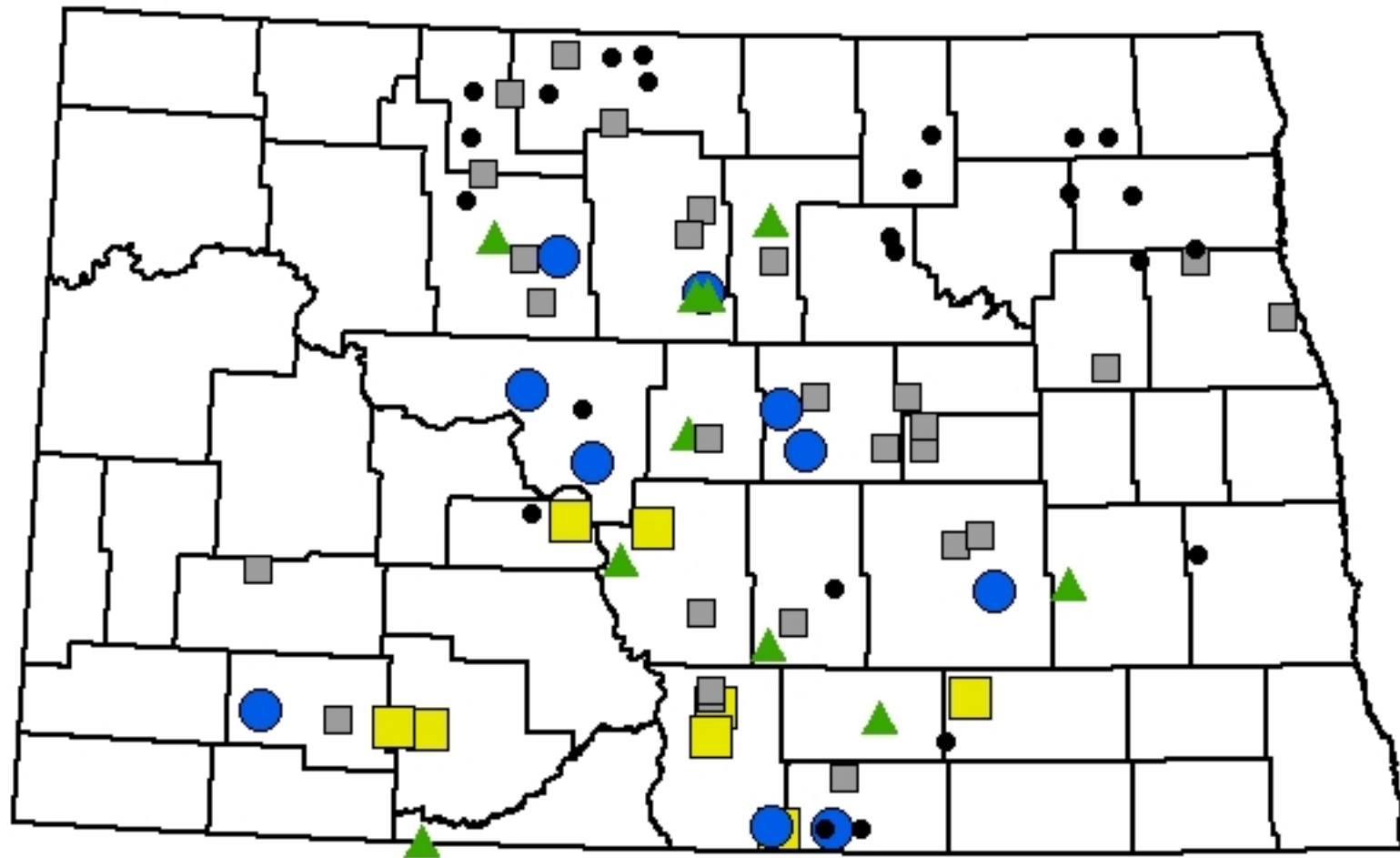


Insect: Spotted Stem Weevil

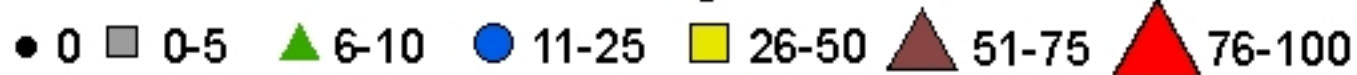


2006 Sunflower Survey

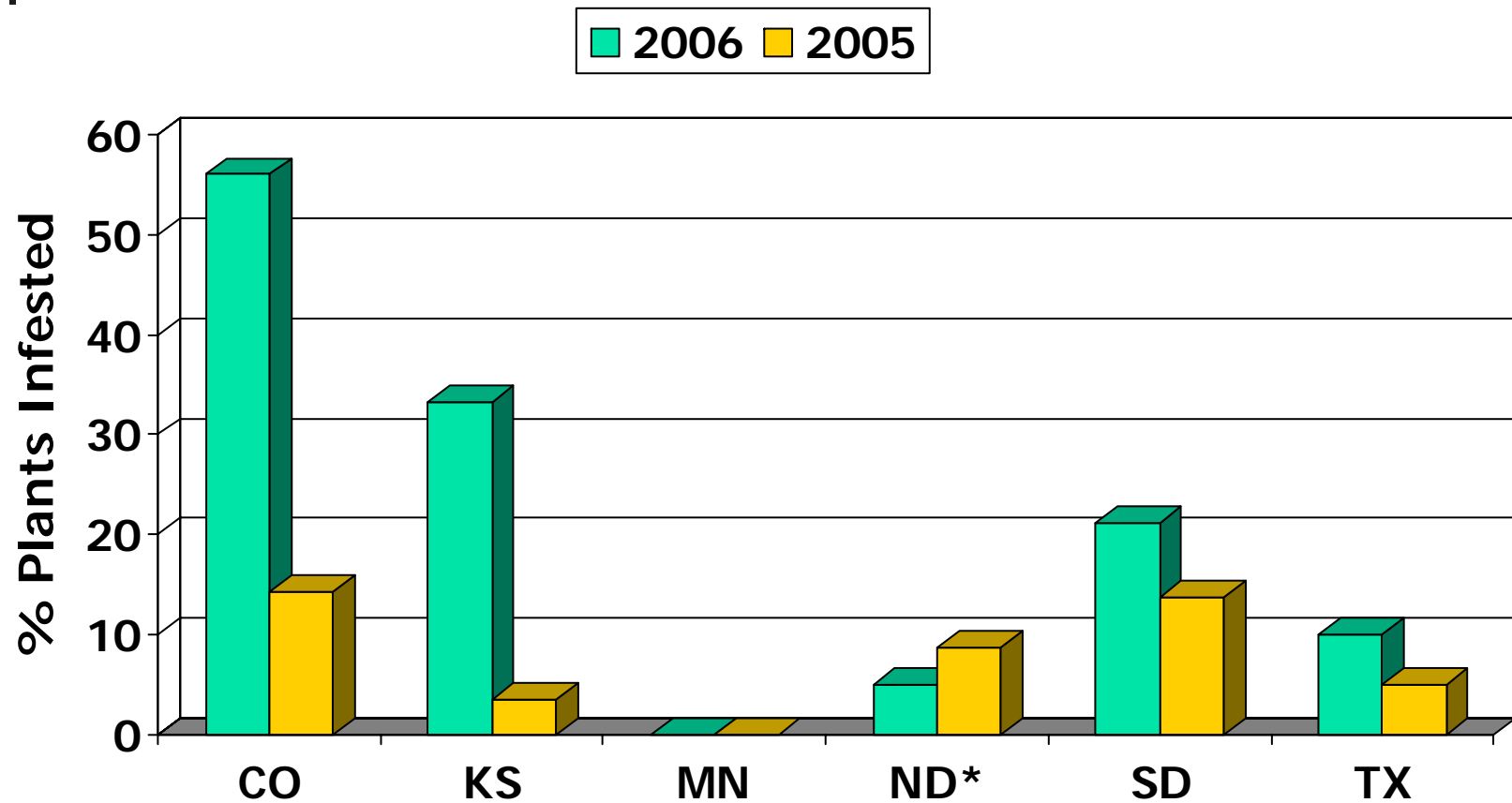
Red Sunflower Seed Weevil



Percent Insect Damage to Seed

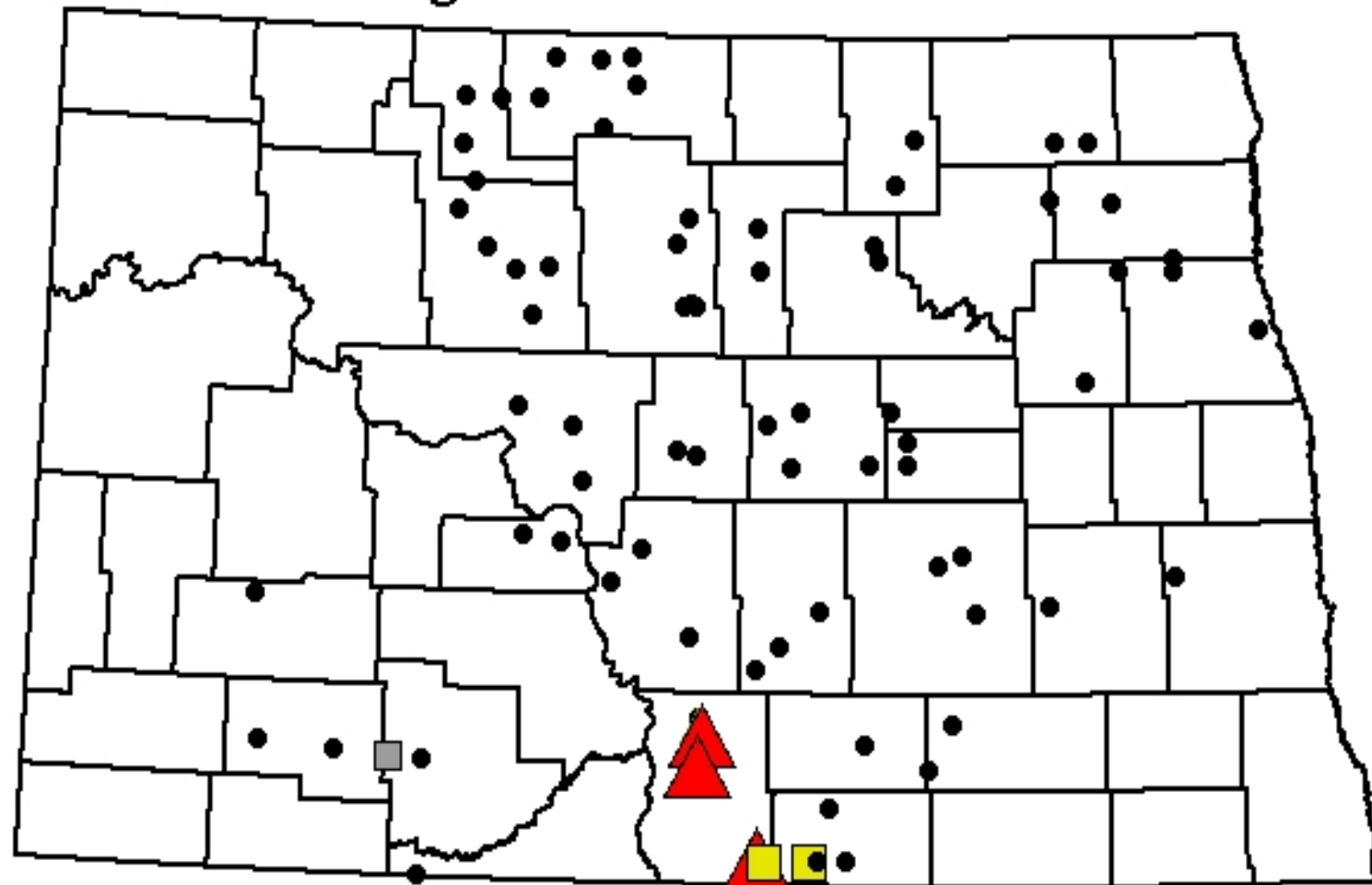


Insect: Longhorned Beetle

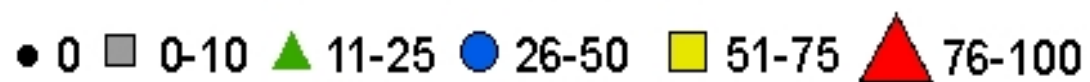


2006 Sunflower Survey

Long Horned Beetle

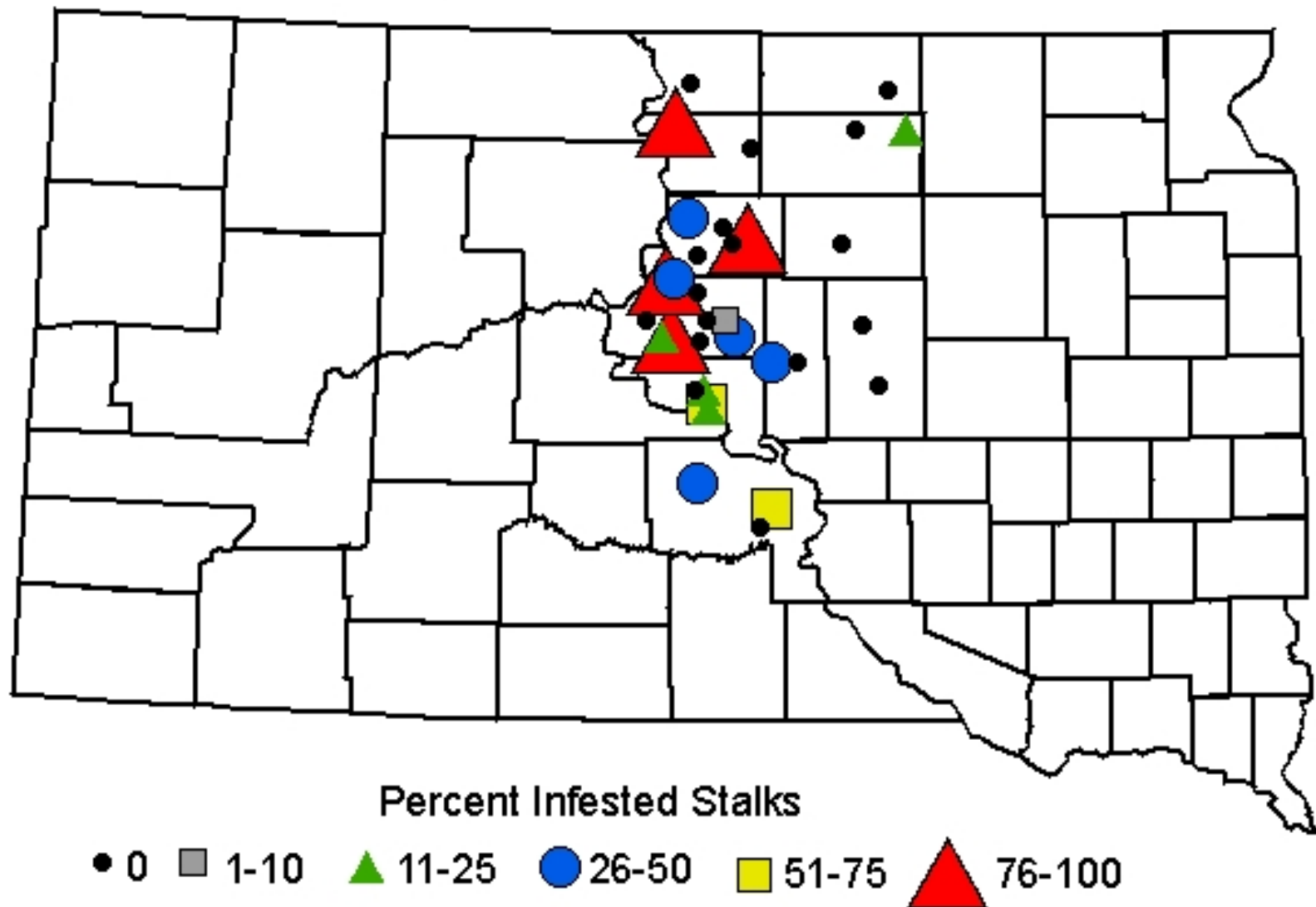


Percent Infested Stalks

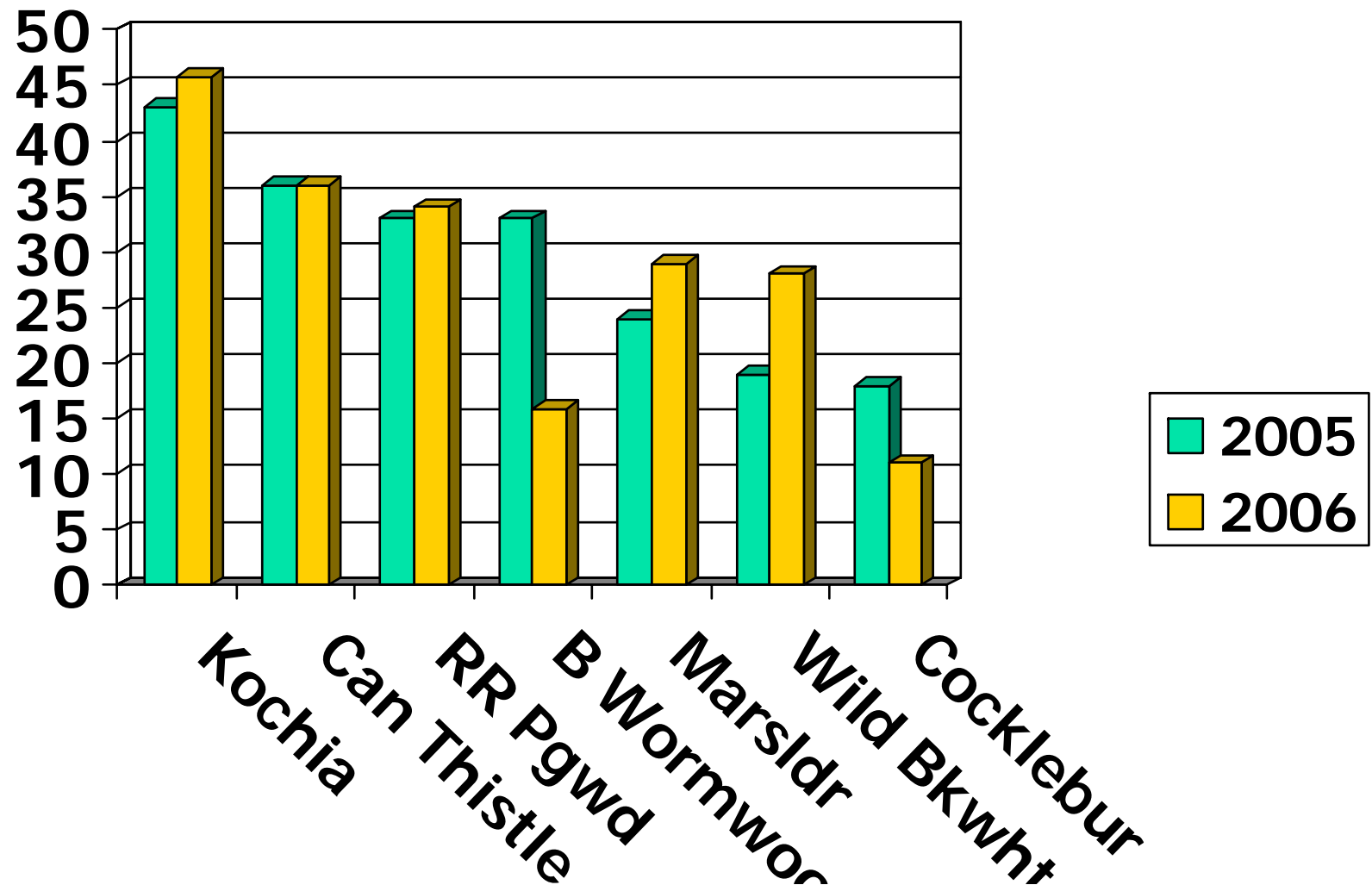


2006 Sunflower Survey

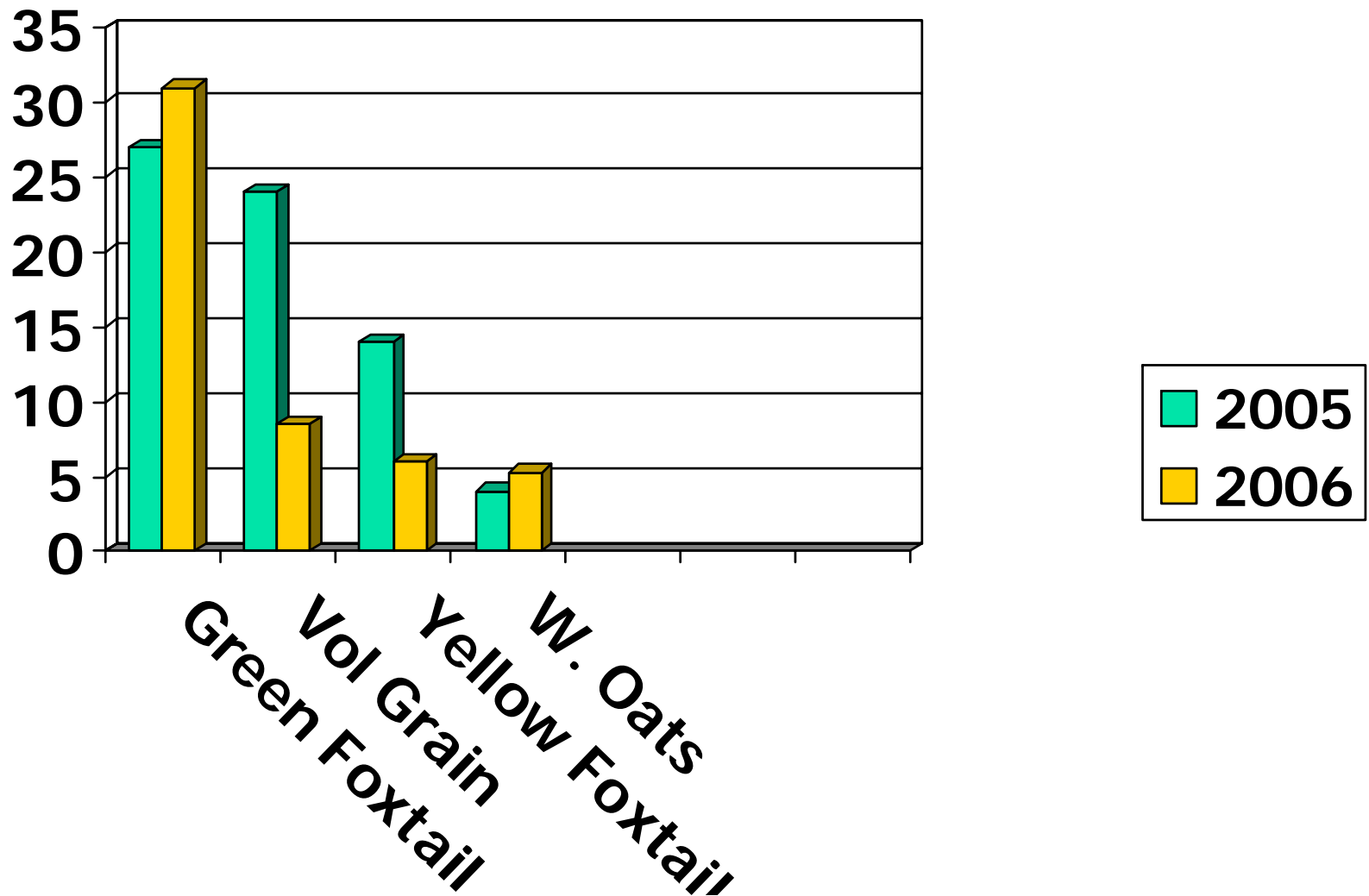
Long Horned Beetle



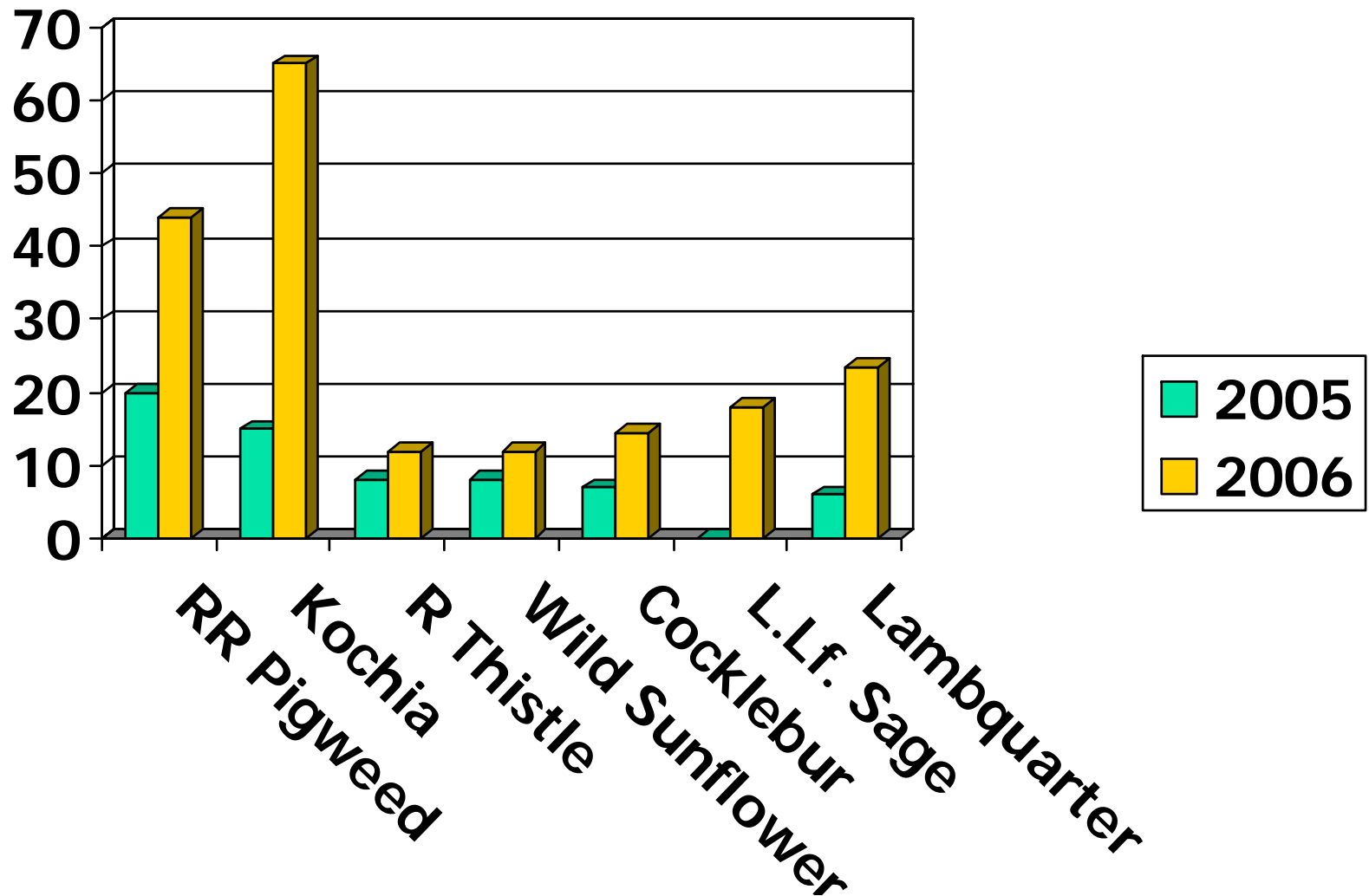
Incidence of Broadleaf Weeds ND/MN 2005 and 2006



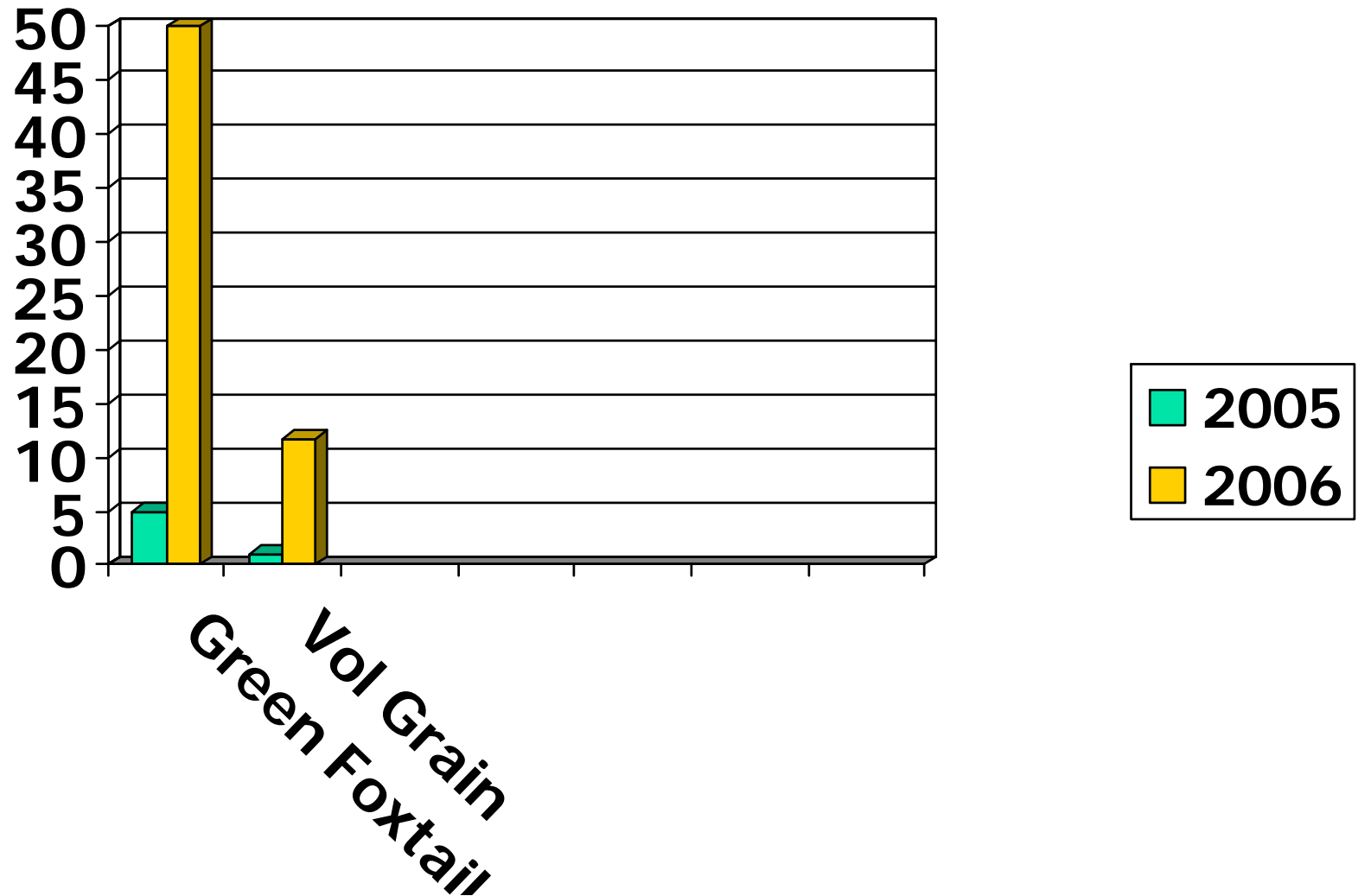
Incidence of Grassy Weeds In Sunflower: ND/MN 2005 and 2006



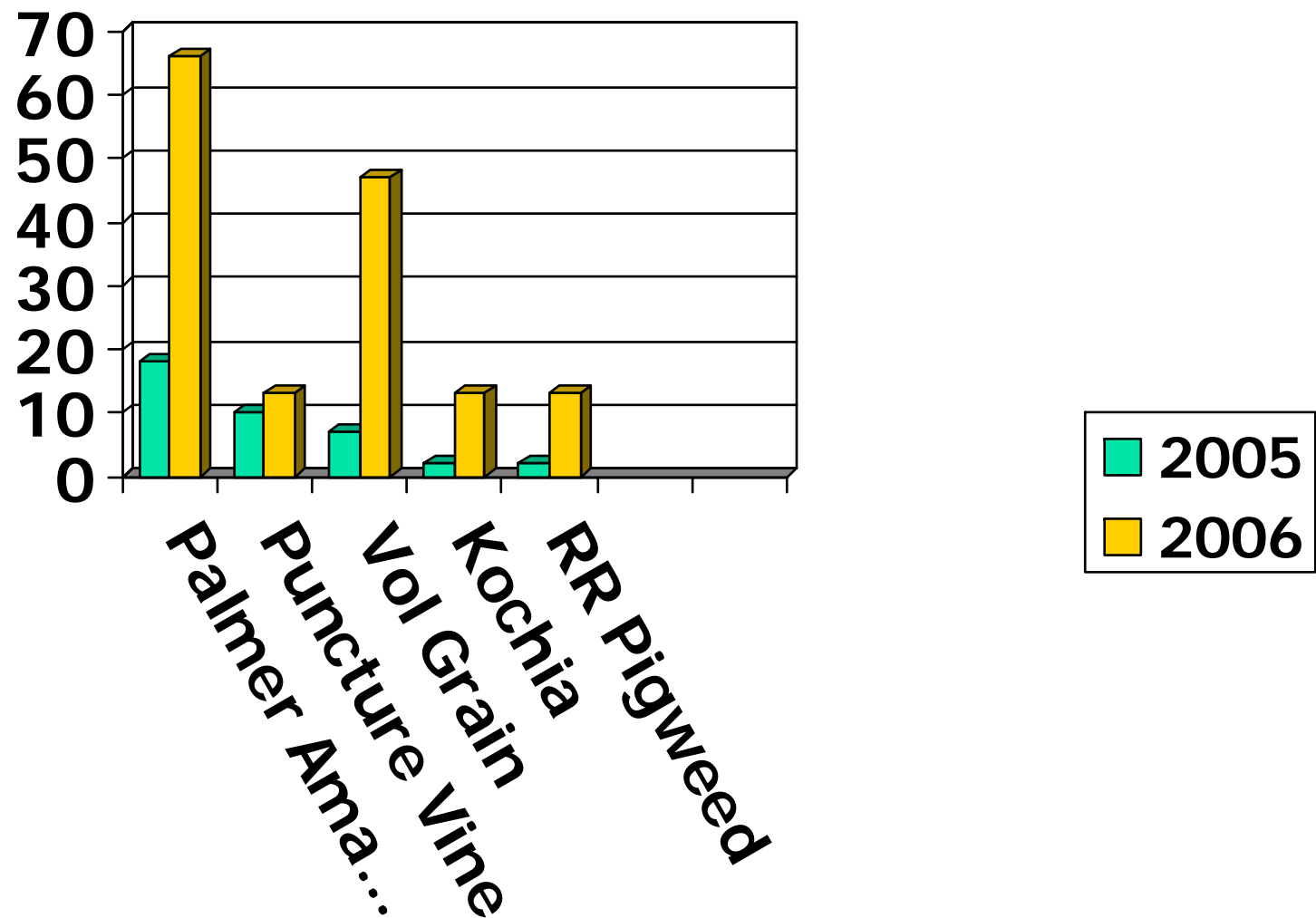
Incidence of Broadleaf Weeds South Dakota 2005 and 2006



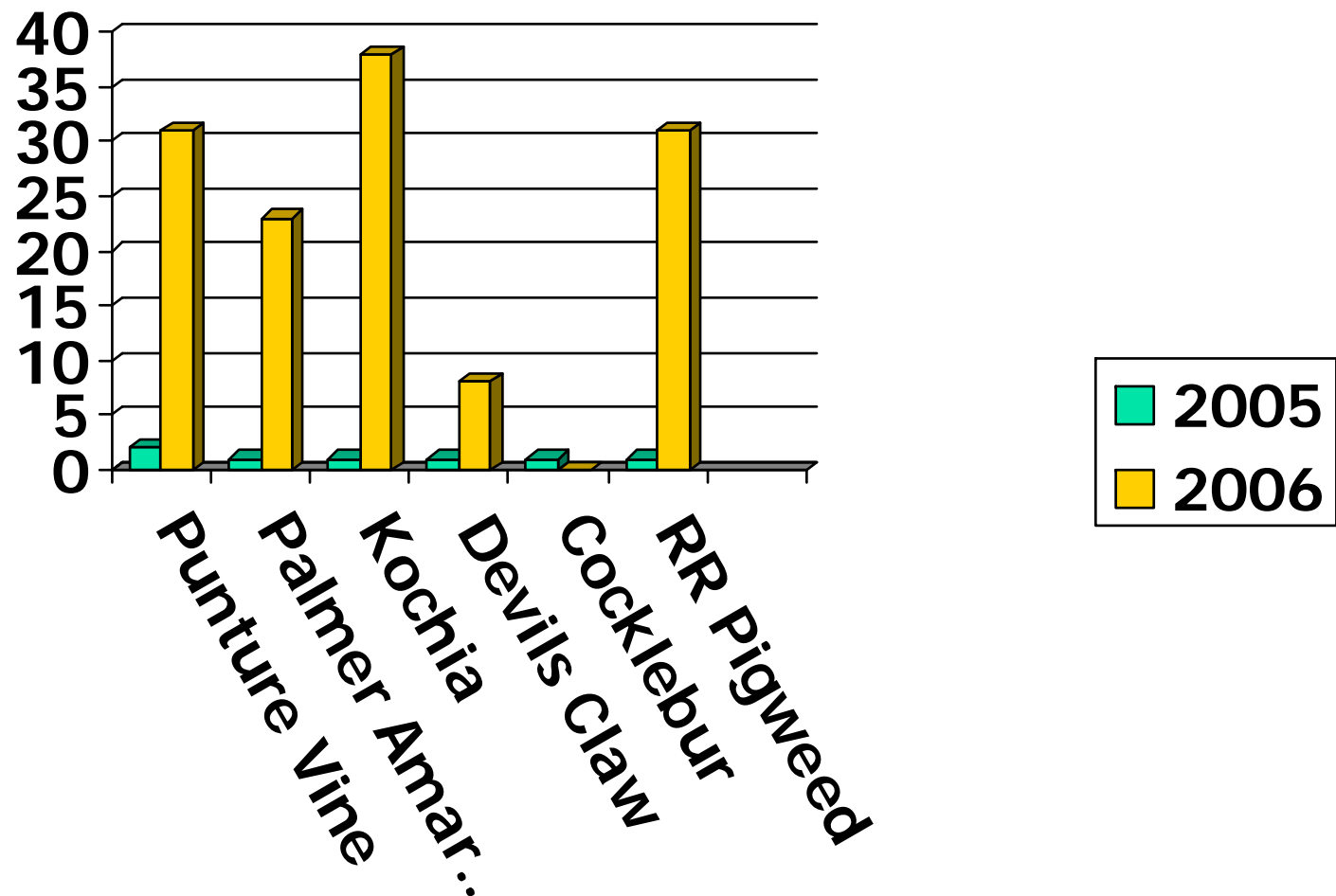
Incidence of Grassy Weeds South Dakota 2005 and 2006



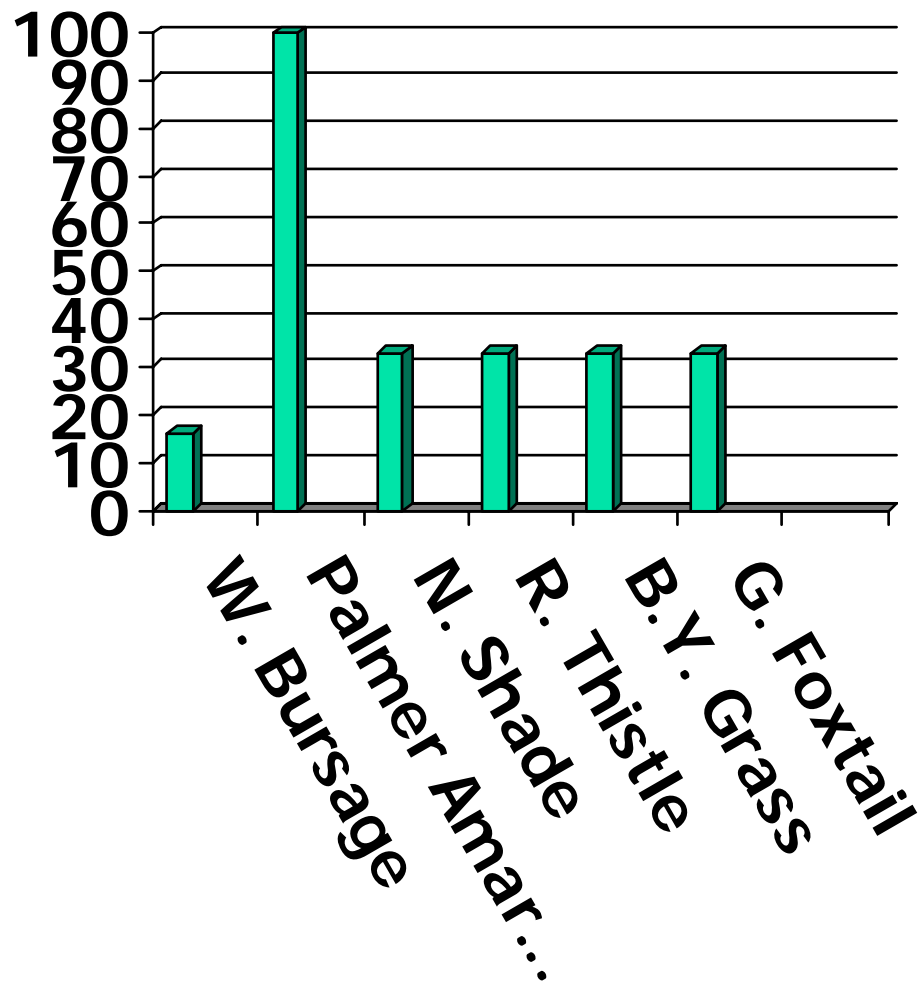
Incidence of Weeds Kansas 2005 and 2006



Incidence of Weeds Colorado 2005 and 2006



Incidence of Weeds Texas- 2006





National Sunflower Web Site

- The Narrative Report of the 2006 Sunflower Survey and other past surveys can be found at the National Sunflower Association Web site:

<http://www.sunflowernsa.com/growers/default.asp?contentID=125>

Thank you!!
Any Questions??

