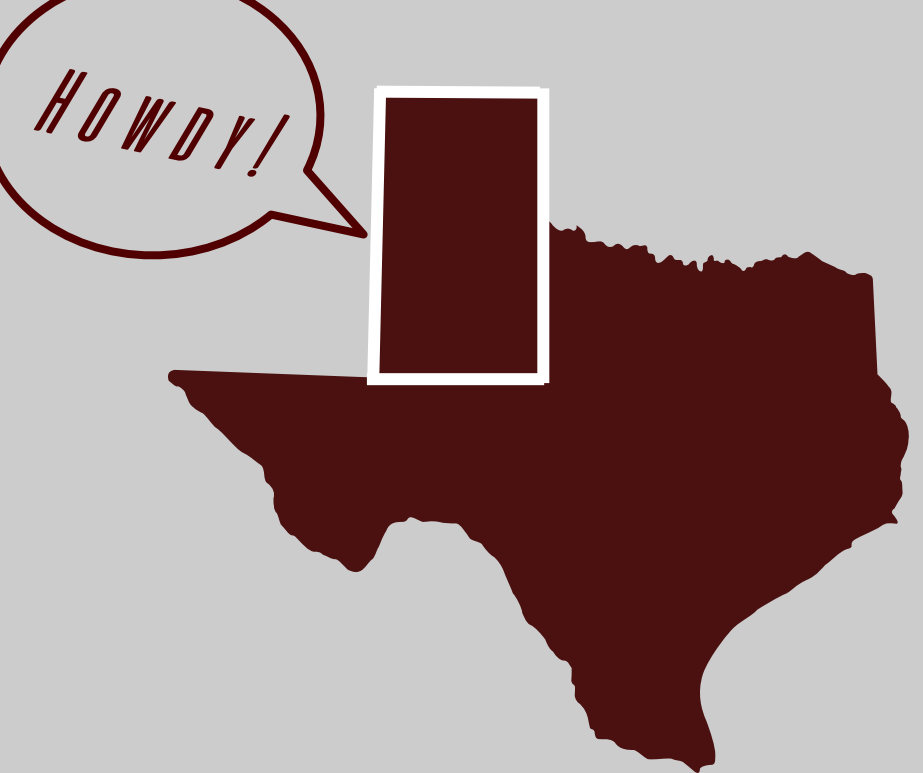


# Farmers' perceptions of soil health management practices on the Texas High Plains

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The Region:



## FARMING THE TEXAS HIGH PLAINS (THP)

**The Crops:**

- Cotton
- Corn
- Sorghum
- Wheat
- Grapes
- Peanuts

**The Environment:**

- Low Soil Organic Matter
- Low Precipitation
- High Evapotranspiration
- High Summer Temperatures

## RESEARCH GOALS

- 1 Determine farmers' perceptions of soil health
- 2 Evaluate soil health management practices farmers are using
- 3 Investigate which soil health management practices farmers are willing to adopt in the future
- 4 Identify farmers' reservations to adopting soil health management practices

## MATERIALS AND METHODS

**WHO?** Pilot Survey: 12 farmers  
Future Survey: 702 farmers

**WHERE?** Pilot Survey: 4 counties of the THP  
Future Survey: 54 counties of the THP

**WHY?** Help inform decisions on future research and extension projects in soil science

**WHAT?** Questions: (1) demographics, (2) Likert-type rankings, (3) rank-in-orders

**WHEN?** Pilot Survey: March – May 2016  
Future Survey: Spring 2017 and 2018

**HOW?** Online (Qualtrics) and paper-based surveys collected in cooperation with County Extension Offices

## CURRENT PERCEPTIONS

- Insect pressure may be higher in fields with more residue
- Soil microbes may be important for crop production
- Crop rotations can help increase soil productivity
- Minimal tillage can help reduce wind erosion

## CURRENT MANAGEMENT PRACTICES

- Residue management
- Cover cropping
- Crop rotations
- Reduced or No-tillage

## FUTURE PLANS

- Adopt reduced or no-tillage
- Incorporate soil microbial inoculants
- Implement cover crops during traditional fallow periods
- Integrate cropping rotations to increase soil organic matter

## ADOPTION RESERVATIONS

- Cost of equipment required for implementation
- Fear of weed pressure
- Limited available water resources
- Cotton is King on the Texas High Plains

## GEARING UP FOR THE 702

### OUR METHODS

Online and paper-based surveys distributed by commodity groups and County Extension Offices; data storage and analysis utilizing SPSS 22

### OUR TIMELINE

Distribution: February 2017 & 2018  
1<sup>st</sup> Reminders: Mid-March 2017 & 2018  
2<sup>nd</sup> Reminders: Mid-April 2017 & 2018

### OUR PARTNERS



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WHAT THEY SAID