



Land Preparation and Planting

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Land Preparation

What is the issue?



- Soil needs to be prepared before seed are placed in the ground



Land Preparation

Why is this important?



- Without proper soil conditions, planter operation and seed placement may be inadequate and cause poor plant populations



Land Preparation

When is this handled?



- Ahead of planting, but timing varies.
 - Can be immediately prior to planting
 - May be several weeks or months ahead of planting for some operations.
- As weather permits
 - Too early - settling/crusting and/or weed problems
 - Termination of cover crops need to be considered

Land Preparation

How is it managed?



- Conventional Tillage
 - Deep soil inversion
 - can warm soil quickly, provide good seed-soil contact, bury pathogens and weed seed, disrupt insect cycles.



Land Preparation

How is it managed?



- **Strip-Till**

- Conservation technique to reduce erosion and minimize hardpan development
- Advantages:
 - Conserve soil moisture during growing season (dry years)
 - Reduced equipment inventory and overall power demand
 - Reduces incidence of TSWV and leaf spot
 - Fewer passes over field, less time to prepare

Land Preparation

How is it managed?



- Strip-Till

- Disadvantages:

- Deplete soil moisture at time of planting
 - Increased chemical control
 - Increases threat of white mold, burrower bug
 - Digging more difficult since planted flat instead of raised bed

Planting

What is the issue?



- Optimizing conditions
 - Timing (soil temps and moisture, disease incidence, thrips flights, etc.)
 - Selecting tools best suited for the conditions
 - certain pesticides may be worthwhile at one timing, but useless if applied at a different part of planting season



Planting

What is the issue?



- Seed selection

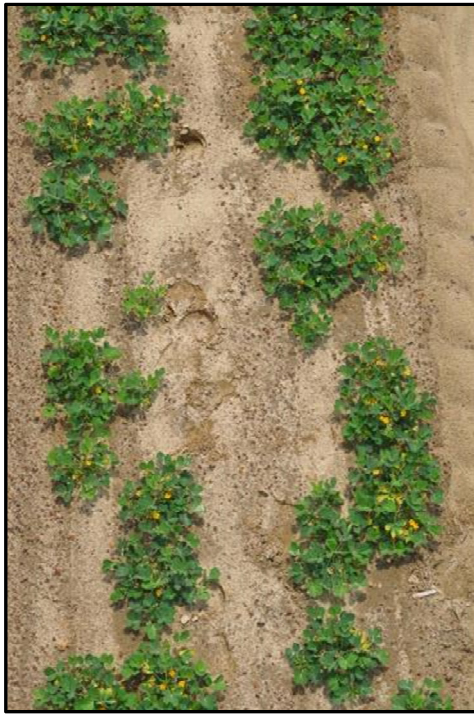
- Farmers can save and plant their own seed, within laws governing certain varieties (i.e. patents)
- Some contracts may specify a certain type of seed (e.g. High-Oleic vs Normal Acid Chemistry)
- Certain varieties have characteristics that may make them more suitable for specific conditions or management scenarios

Planting

Why is this important?



- Improper planting techniques can result in poor plant stand and ultimately doom the crop



Planting

When is this handled?



- Several weeks to months before planting for management decisions, ordering seed, etc.
- Planting usually mid-April through mid-June, but majority is in the first 3 weeks of May
 - Keeping an eye on soil conditions and weather forecast is critical

Planting How is it managed?



- Planter and tractor settings
 - Check for proper function and calibration
 - seed depth, gearing for seed rate, application implements (liquid in-furrows, metering hoppers, row cleaners, press wheels, etc.)

