

United States Department of Agriculture, University of Arkansas, and County Governments Cooperating

## TIPS FOR NO-TILL COTTON PRODUCTION

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#### **Field Selection**

- Same as conventional tillage.
- Control erosion using waterways, rows on contour and filter strips.
- Subsoil if tillage pan exist and/or extreme traffic has occurred.
- Avoid land with heavy infestations of perennial grasses and vines.

#### **Vegetative Cover**

- Cover crops may be needed if crop residue is inadequate.
- Small grains, especially wheat is preferred.
- Excessive growth can interfere with planting, emergence and growth.
- Do not plant until cover crop and weeds are dead.
- Delayed termination of host weeds may increase incidence of early-season pests.

#### **Fertilizer and Lime**

- Soil test same as conventional.
- Adjustment for cover crop may be necessary

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## **Weed Control**

- Kill vegetation prior to planting.
- 2,4-D at least 30 days prior to planting will improve control of some winter annuals.
- May require two burndowns.
  - o First, at least two weeks prior to planting.
  - Second, can be applied at planting.
- Identify weeds in seedling stage.
- See Roundup Ultra and Gramoxone Extra labels for rates on specific weeds.

### **Planting Equipment**

- Use conservation tillage or no-till planting equipment.
  - o Heavy duty down pressure springs.
  - o Tool bar weight brackets.
  - Double-disc or offset double- disc openers.
  - O Heavy duty press wheels.
- Plant 4 to 5 mph
- Use coulters if the planter does not have double disk openers.

#### **Planting**

- Soil temperature 68°F for three consecutive days with a favorable five day forecast.
- Planting may be delayed if crop or residue is dense.
- Plant seed ¼ to ½ inch deep.
- Good closure of seed furrow can help ensure a better stand.
- Plant stands may be reduced plant ½ to 1 seed per foot more than conventional.

## **Seedling Disease**

- Soil-borne diseases have potential to cause more problems in no-till.
- Delay planting until conditions are favorable.
- In-furrow applications of fungicides are recommended.

#### Insects

- No difference due to tillage for boll weevils, thrips, aphids, bollworm and stink bugs.
- Cutworms in seedling cotton are often a problem with heavy cover or crop residue.
  - Apply pyrethroid with preemergence herbicide.
- A good scouting program throughout the season always pays.

#### **Stalk Destruction**

- Flail shredders produce a uniform residue cover.
- Leave stalks 6 to 8 inches tall to protect rubber wheels on planter.
- Submit an application for the use of a flail shredder to State Plant Board for pink bollworm control in no-till cotton.