Cotton Variety Selection
- Select 4 or 5 proven varieties to spread risk and maturity across farm
- Plant new varieties on 10 - 15% of farm
- Refer to Official Cotton Variety Trial results for variety performance information

New Varieties That Show Potential
| PHY 340 W3FE | DP 1820 B3XF | DP 1823 NR B2XF |
| PHY 3214 B2XF | PHY 300 W3FE | ST 4949 GLT |

Proven Varieties
| DG 3385 B2XF | DP 1725 B2XF | DP 1518 B2XF |
| PHY 312 WRF | NG 3522 B2XF | DP 1646 B2XF |
| PHY 444 WRF | ST 4946 GLB2 | UA 222 |

Cotton Planting Dates

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<tr>
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Seeding Rates
- General Recommendation – 48 K Seed/A
- Sandy Loams 35 – 40 K seed/A (2.5 seed/ft)
- Silt Loams 40 – 48 K seed/A (3.0 seed/ft)
- Clay Loams 55 K seed/A (4.0 seed/ft)

Seeding rates should be increased 10% if cotton is planted in late May or early June.

Replant Decisions
Uniform stands as low as one healthy plant per foot of row are generally preferred over late-planted cotton. Cotton will compensate if skips greater than 3 foot skips are not frequent. When the decision to replant is not clear, it is usually best not to replant.

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**Weed Management (continued)**

Glyphosate-resistant Palmer pigweed are present in all cotton producing counties. Farm-wide pigweed management utilizing non-selective and residual herbicides to reduce seedbanks on ditches, turnrows and field borders is recommended.

**Herbicide Products**

Refer to the MP44 Recommended Chemicals for Weed and Brush Control for the latest herbicide recommendations.

**Insect Management**

**Pests and Thresholds**

- **Monitor fruit retention** - Maintain 80% retention going into bloom
- **Cutworms** - Plant into clean fields. Treat when stand is threatened
- **Thrips** – 2 - 5 thrips per plant and damage present (min. 5 plants checked per area)
- **Tarnished Plant Bugs (TPB)** - 3 TPB per 5 row feet or 1TPB per 3 row feet (problem field) or 8 – 12 TPB per 100 sweeps from early square through cutout (NAWF=5). After cutout treat for 6 TPB per 5 row feet.
- **Bollworm (BW) and Tobacco Budworm (TBW)**
  - **Non-Bt Cotton** - 1 BW or 1 TBW (<0.25 inch) per 2 row feet
  - **Bt (Dual and Dual + Vip3A gene) Cotton** – 1 BW or 1 TBW (>0.25") per 4 row feet
- **Armyworm** – 10 - 20 FAW present/100 plants
- **Aphids** - 50% of plants infested with actively growing colonies and no predators present
- **Spider Mites** - 50% of plants infested with actively growing colonies
- **Stink Bugs** - 1 stink bug per 6 row feet or 20% boll damage
- **Loopers** - 20% defoliation

**Insecticide Products**

Refer to the MP144 Insecticide Recommendations for Arkansas for the latest insecticide recommendations.

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<th>Heat Units Beyond Cutout (NAWF=5)</th>
<th>Target Pest</th>
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<tr>
<td>250</td>
<td>Tarnished Plant Bugs</td>
</tr>
<tr>
<td>350</td>
<td>Bollworms, Budworms,</td>
</tr>
<tr>
<td>450</td>
<td>Stink Bugs</td>
</tr>
<tr>
<td>500</td>
<td>Defoliators (Spider Mites, Armyworms)</td>
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**Heat Unit (HU) Based Termination Guidelines**

**Disease and Nematode Management**

- **Seedling Diseases** - If planting into cool/wet soil early in season use a systemic fungicide seed treatment or in-furrow spray
- **Foliar Diseases** - Maintain optimum Potassium levels to fight foliar diseases. Fungicide use is only recommended on early/severe infestation
- **Bacterial Blight** - Plant disease free seed or resistant varieties
- **Nematodes** - Root Knot and Reniform
  - Sample every 3 years and consider rotation to resistant crops to reduce numbers
- **Light to Moderate Pressure** - Seed treatment or in-furrow nemacide
- **Heavy Pressure** - Soil fumigant and/or seed treatment

**Fungicide and Nematicide Products**

Refer to MP 154 Arkansas Plant Disease Control products Guide for the latest disease and nematode recommendations.

**Irrigation Management**

- **Start on time** (7 - 10 days before bloom)
- **Target a 2” deficit on sandy soil and a 3” deficit on heavier soils for subsequent irrigations using the Irrigation Scheduler and adjust accordingly.
- **The Delta Plastics Pipe Planner program is recommended on furrow irrigated fields. Contact your local County Extension Office for details or assistance with this program.
- **Termination** – 350 - 650 Heat Units beyond cutout (NAWF=5)

**Plant Growth Regulators**

- **Very-Early & Early Maturing Varieties** - No earlier than 10th nodes and apply 6 - 8 oz. or at bloom use 10 - 16 oz. (higher rates needed if terminals are extending). Use as needed the rest of the season
- **Mid to Full Season Varieties** - At 10th node apply 6 - 8 oz., 10 to 14 days later apply 8 - 10 oz., then use 16 - 20 oz. after bloom (higher rates needed if terminals are extending) as needed

**Harvest Aid Timing**

Time applications based on heat units beyond cutout (NAWF=5), boll slicing, and percent open bolls.

- In most cases cotton in Arkansas can be defoliated without yield penalty when
  - 50 to 60% of the bolls are open
  - 850 HU beyond cutout reached
- Cut uppermost harvestable boll – seed coat will be dark and no jelly present
- Refer to the MP503 Mid-South Defoliation Guide

**Harvest Aid Application**

- Coverage is key
- No air induction tips
- Use a minimum 5 gallons of water/acre for air applications
- Use at least 13 to 15 gallons of water/acre for ground applications
- For best results, two applications are recommended on actively growing plants

**Harvest Aid Product Selection**

Refer to the MP 503 Mid-South Cotton Defoliation Guide for the latest defoliation recommendations.

Visit [www.arkansascrops.com](http://www.arkansascrops.com) for specific MP guides and other crop management information.