

Cotton Notes

When is it time to defoliate?

It is important for growers to carefully consider crop maturity, field conditions, and the environment when making the decision to defoliate cotton. Much of the 2016 crop was planted later than normal. Therefore, it is likely that it will be defoliated later than normal and possibly under cooler conditions. Defoliating too early lowers yield and fiber quality or micronaire. Defoliating too late increases the likelihood of boll rot and lint damaged or lost due to weathering. Defoliating too late also increases the possibility that defoliant activity may be inhibited by lower temperatures. It is generally safe to defoliate when about 60 percent of the bolls are open. Unopened bolls should also be cut and examined to ensure that the harvestable bolls are mature. It is important to walk each field, decide which bolls are to be harvested, and examine these bolls to determine whether they are mature.

It is shown that defoliants work best on mature cotton under warm, humid, sunny conditions. Cool temperatures at the time of application and for the three to five days afterward can inhibit the activity of defoliants and cause less than desirable defoliation. Better defoliation will occur if you can wait for a sunny, warm spell that is predicted to last for at least three to four days.

Which defoliation option is best for your farm?

Listed below are the most popular defoliation options for cotton farms in Hertford County along with a description for each one.

- **Folex + Prep + Dropp (3-Way)** - This is the most widely used defoliation tank-mix. Folex is temperature sensitive but is considered to be a good defoliation tool. Prep is regarded as a good boll opener. Dropp is effective in preventing regrowth. Rates include: Folex 8 oz. per acre (hot/humid weather), 10 oz. per acre (high 80s), and 12 oz. per acre (low 80s); Prep (1 qt. per acre); Note: This rate can be reduced to 1.3 pt. per acre if there are fewer bolls to be opened. Dropp - 3.2 oz. per acre.
- **Finish + Ginstar** - This is the “premium” tank-mix if temperatures become cooler. Finish is good defoliation and boll opener. Ginstar is known for its good defoliation ability and for preventing regrowth. The rates for these products are: Finish (1 qt. per acre) and Ginstar (6 oz. per acre). During warmer weather, the rates should be changed to: Finish (1.3 pt. per acre) and Ginstar (6 oz. per acre). Note: This is considered to be the highest-priced defoliation option and should only be considered in high-yielding field situations.

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- **CottonQuik/FirstPick** – This is the best cold weather boll opener & defoliant. This option is often used for late planted cotton and in fields where there are a lot of bolls that need to be opened. This product contains the boll opener, ethephon, plus urea sulfate which acts as a synergist to improve the defoliation characteristics of ethephon. The rate is 1-2 qt. per acre.
- **Ginstar or Adios or Cutout or Redi-Pik + Prep** – This is a good option if regrowth is present and you are trying to economize when it starts to cool off. Ginstar and the other products listed above are a combination of Thidiazuron (Dropp) and Diuron. The rates for Ginstar, Adios, Cutout, and Redi-Pik are 8 oz. per acre and should be paired with Prep at 1 qt. per acre for best results. The rate for Prep can be adjusted down to 1.3 pt. per acre in situations where there are fewer bolls to be opened.
- **PPO Inhibitors (Aim or ET or Display)** – These products work better on cotton short in height with less foliage. Rates: Aim: 1 oz. per acre + crop oil; ET: 2 oz. per acre + crop oil; Display: 1 oz. per acre + crop oil. Note: It is recommended that these products be used in a 3-way treatment with Prep & Dropp.

Also, consider these application tips:

The key to successfully defoliating cotton is to apply appropriate application volumes, which are no less than 15 GPA and up to 20 GPA. This will eliminate the risk of inadequate defoliation and having to make a second application. Also, flat fan nozzles (11002 and 8002) are recommended for use with these products to provide adequate coverage and minimize drift.

Disclaimer: *The use of brand names in this publication does not imply endorsement of the products or services named or criticism of similar ones not mentioned.*

Sincerely,

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