

Maximizing your cotton's potential with the right harvest aids

Tools and tips to take control of cotton harvest

There is one crop in American agriculture unlike any other. Cotton, a perennial, grown as an annual crop, is a woody-stemmed plant that allows growers to manipulate when the crop's lint is available for harvest. Typically, the cotton plant does not die after the lint is harvested but continues growing until the entire plant is terminated either mechanically or chemically at the end of the season.

With the help of harvest aids, cotton growers can optimize harvest times and maintain good lint quality. Jacob Richburg, technical services manager for Nufarm North America, says understanding the complexity of a cotton plant is a key factor when growing and harvesting the crop.

"Harvest aids enable a grower to control more of their crop, whether that would be quality or harvestability," Richburg says. "As we get towards the end of the year or middle

of the season, we want to maintain as much quality and quantity lint as possible. Using harvest aids allows growers to manipulate cotton's development, controlling the timing of the plant's shift from vegetative growth to reproductive growth, as well as allowing growers to plan the optimum time to harvest specific fields."

HERBICIDAL VS. HORMONAL DEFOLIANTS

Harvest aids can be categorized into two different types of defoliants: herbicidal and hormonal. Both types of aids are used to achieve the same result of optimizing the timing of harvest. However, some aids have different intentions and results. For example, a grower could apply an aid to inhibit plant regrowth, defoliate the crop, open the cotton bolls or desiccate the leaves.

"The hormones are basically accelerating what the plant would normally do during harvest," says Dan Beran, director of technical services for crop protection for Nufarm. "The hormone is triggering the plant to release its leaves or open its bolls – much like in the fall when trees lose leaves – it's a hormonally induced reaction."





Richburg says herbicidal aids generally consist of common herbicides applied at a reduced rate. This in turn stresses the plants and causes them to abort the leaves, thus defoliating the crop. Nufarm's herbicidal products are targeting the vegetation of the plant and are applied to achieve more leaf drop.

APPLICATION TIMING IS KEY

The timing for application greatly depends on the growing region. Since cotton is primarily a southern crop, harvest can take place between late September and early December. Richburg says environment can play a key role when applying harvest aids.

"Typically, as temperature and rainfall increase, you're going to see more growth from cotton and in turn you may need more product per acre, depending on the aid," Richburg says. "Cotton growth is very complex when it comes to the environment. When you're looking at applying these different aids, the rates may change depending on a field's specific growing conditions."

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Harvest aids are commonly applied in a 10- to 14-day window before harvest is started. Richburg says growers usually apply a boll opening aid when 60% of the bolls have reached maturity. Producers may also apply an early defoliant type aid if the cotton is creating a canopy of leaves that are reducing the sunlight exposure of the lower bolls on the plant.

Producers will assess their cotton quality and decide when to apply an aid based on the lint quality from the crop. Beran says some producers will choose their aids based on if they are picking their crop once or allowing regrowth and picking twice.

"A benefit to manipulating the crop or speeding up the crop is that you are able to keep the quality as your cotton is still in the field that you need to harvest," Beran says. "You can usually use these chemicals to speed up the harvesting and keep the excess moisture that you may be getting in the late fall out of the lint and deteriorating the quality."





KNOWING YOUR COTTON HARVEST AID OPTIONS

Nufarm has a cotton harvester aid for every grower's goals. Whether you are searching for a defoliant, boll opener or to restrict vegetative growth, Nufarm can help.



Cutout™ is for fast defoliation even when cold fronts are in the

forecast. Cutout offers consistent, clean defoliation, removing mature leaves and new growth to reduce trash and preserve lint quality. Cutout can be tank-mixed with other harvest aids to improve performance for a faster finish.

Super Boll®

Super Boll® is a plant regulator that hastens the

opening of mature cotton bolls, enabling growers to harvest earlier and increase recoverable yield.



Terminate increases the natural ethylene synthesis process to quickly and

effectively promote leaf drop and open cotton bolls. As a single application premix, crops may be harvested up to five days faster – reducing the risk from damaging weather. Maximize profits with cleaner crops, preserved lint quality and quicker harvest turn.

Gin Out™

Gin Out™ is a plant growth regulator (PGR) that modifies the cotton

plant in several beneficial ways. Now that cotton is established and finally starting to grow rapidly and develop, PGRs are going to be a necessity to reduce fruit loss (square shedding). Reducing excessive vegetative growth from the increased moisture and hot temperatures is going to be key to growing a successful crop in a shorter time period.

CONCLUSION

It's crucial to be educated on your cotton harvest options, and to choose the products and management practices that are best suited to your operation. Regardless of cotton growers' growing conditions, Nufarm is here to help them select the right harvest aids for their specific needs.

