



HERBICIDE/DEFOLIANT

SECOND SHOT DEFOLIATION

COTTON DEFOLIATION

ET[®] Herbicide/Defoliant is the best tool for second shot defoliation. ET quickly and economically removes both mature leaves and juvenile regrowth that may be left behind after the first defoliation application. Unlike other PPOs, ET promotes the formation of an abscission layer that facilitates defoliation without desiccation of the leaf. This softer defoliation creates less lint trash and contributes to higher gin quality.

Key Benefits of Using ET in a Defoliation Program

- Proven leaf drop activity on both mature leaves and juvenile regrowth
- Does not stick leaves, even at high label rates
- Provides a softer defoliation, reducing lint trash and improving gin quality
- Maintains top performance in both warm and cool conditions, taking the guesswork out of defoliation

Use Recommendations

Program	Recommendation	Timing	Use Information
Second Shot Boll Opening + Leaf Drop	ET 1.5 fl oz + ethephon + COC 0.5% or NIS 0.25%	7 days after initial	Use this recommendation if most leaves were removed after first shot application and juvenile regrowth is minimal.
Second Shot Boll Opening + Leaf Drop	ET 2.0 fl oz + ethephon + COC 0.5% or NIS 0.25%	7 days after initial	Use this recommendation if a large number of mature leaves remain after first shot application and/or if vigorous juvenile regrowth is present.

2nd Defoliation Application ET 1.5 fl oz + Ethephon 32 fl oz



Before Treatment



After Treatment



SECOND SHOT DEFOLIATION FOR FIRST RATE COTTON

Insights from a Local Cotton Grower/Ginner

- David Grossman

“Our cotton buyer has made comments about the consistent good grades of our cotton. Many factors contribute to good grades and higher value cotton, but cotton that is picked as cleanly as possible consistently nets values of two to four cents higher per pound. Another important aspect of achieving optimum grades and cotton value is picking capacity. We have the picking capacity to get our cotton out of the field quickly. This is critical with uncertain weather, and the speed of current varieties wants to keep the cotton growing, especially in warm temperatures. We don't like to let the cotton sit when we feel it is time to defoliate.

“We have been using ET for six to seven years on our 2nd shot application. We use a rate of 2 oz of ET with ethephon and go in as close as possible to 7 days after the first application. This treatment is excellent on defoliating remaining mature leaves and holding back any new juvenile growth that is popping out up and down the stalk. There are no adverse effects with the 2 oz rate either.

“In 2018, we took an 800-acre block of one of our gin customers; treated all with TDZ plus ethephon 1st shot. Then, we split the 2nd shot: 400 acres with a shot of TDZ plus ethephon and the other 400 acres with 2 oz ET plus ethephon. When ginned, the value of the treated side with ET was 2.8 cents per pound higher.

“Our defoliation program may cost a little more but has proven to be economical and puts more money in our pocket when the cotton bales leave the gin.”

David Grossman grows cotton on his own farm and manages Quito Gin in Itta Bena, Mississippi.



The Value of 2nd Shot Defoliation with ET

	Treated Acres with ET	Treated Acres with TDZ
Yield	1700 lbs/acre	
Price	56.25 cents/pound	55.18 cents/pound
Leaf	3.32	3.92
\$/Acre	\$956.25	\$938.06
Difference	+ \$18.19/acre on ET treated acres	

Results are from cotton planted May 1, 2020 and harvested Sep 25, 2020 in Macon, MS (1 field - half treated with ET, the other half with TDZ). ET treated acres had higher overall brightness than TDZ treated acres which also contributed to higher price.