



AN ADJUVANT TO IMPROVE COTTON DEFOLIATION AND BOLL OPENING

TARGET	Defoliation	CROP	Cotton (<i>Gossypium barbadense</i> L.)	TRIAL DATE	2009
LOCATION	Sunbelt Agricultural Exposition - Moultrie, GA, USA		RESEARCHER	Michael Williams, Farm Site Manager	

WHY DEFOLIATE?

Removing leaves and opening bolls with harvest aids are important components of a management plan for producing high-quality cotton fiber. When not properly managed, harvest aids may reduce yield and quality.

Some benefits of defoliation include:

- › Increases exposure of bolls to sunlight, which causes faster drying and opening.
- › Picking operations can begin earlier in the day due to faster drying.
- › Reduces trash and green leaf stain (improves grades).
- › Reduces boll rot.

THE ORO AGRI ADJUVANT ADVANTAGE

- › Superior spreading, wetting and penetrating properties
- › Assists, accelerates and boosts performance of many other pesticides
- › Effective at various pH levels, and does not affect pH
- › Inherent odor masking properties
- › Speeds up morning dew drying to reduce spore germination opportunity
- › Improves plant canopy penetration
- › Cleans spray nozzles and prevents clogging
- › Oro Agri adjuvants can be used in lieu of non-ionic, silicone surfactants, as well as petroleum oils
- › All Oro Agri products are ideal for use in sustainable growing practices

RESULTS

On average, 56 bolls per 10 yard row did not open in the plots treated without WETCIT®, while an average of only 5 bolls per 10 yard row failed to open in the plots treated with WETCIT.

This indicates that by simply adding WETCIT to a tank mix, the efficacy of commonly used growth regulators/boll-openers can be significantly enhanced - meaning harvest operations can start earlier, the percentage of cotton harvested during the first picking is increased and the need to re-pick fields (and the associated costs) can be dramatically reduced.

Including WETCIT in the spray mix also noticeably improved the level of defoliation achieved by Dropp/Def 6 alone - while plants treated without WETCIT added to the spray retained some of their green matter, those in the plots treated with WETCIT lost 100% of their leaves and green matter.



UNTREATED

Incomplete defoliation in plots sprayed without adding WETCIT to the spray mix. Poor defoliation is clearly visible.



TREATED

Visibly improved defoliation in plots sprayed with WETCIT added to the spray mix. Adding WETCIT to the spray mix greatly enhances the efficacy of defoliant products.



UNTREATED

Unopened bolls in plots sprayed without adding WETCIT to the spray mix. Taken over 10 yards per row, an average of 56 bolls failed to open.



TREATED

Approximately ten times fewer unopened bolls with WETCIT added to the spray mix. Taken over 10 yards per row, an average of only 5 bolls failed to open.