# COTTON DEFOLIATION PROTECTING YOUR INVESTMENT IN YIELD

TECH NOTE SERIES

Version 3 | Date Nov 2020 | Ref 66 | Page 1

#### **KEY POINTS**

SACOA's cotton range of BIOPEST™, ENHANCE™ and CROPSHIELD™ have been developed specifically to improve the performance of cotton specific chemistry and in the case of BIOPEST™ provide standalone pest control.

#### • ENHANCE™

Higher emulsifier loaded products like  $ENHANCE^{TM}$  facilitate rapid defoliation and are fit for the 0.5L/ha use rate.

#### CROPSHIELD™

Fit for the 1L/ha use rate as a DC-Tron® replacement.

#### BIOPEST™

Use as a Canopy® equivalent for standalone control of sucking pests and in tank mixtures with glyphosate.

Our independently conducted defoliation research aims to provide simplified solutions and solid replicated data to prove the performance of our products.



**Image 1:** ENHANCE™ - Pre-Application.

# DEFOLIATION - ALL OILS ARE NOT THE SAME

The SACOA cotton product range has been developed for specific tasks.

BIOPEST™, due to its unique base oil and formulation, is specifically designed to be safe for use in-crop for control of sucking pests and suppression of chewing insects.

Our defoliation products *ENHANCE™* and *CROPSHIELD™* have specific characteristics such as higher emulsifier loadings which make them more effective carriers in assisting defoliation active ingredients.

Other products in the market are recommended for season long usage – in early season mixtures with glyphosate for sucking pest control, as carriers for insecticides mid season and for standalone sucking pest control – but are they really effective as defoliants? We set out with our independent large scale and replicated trial work to find out.



Image 2: ENHANCE™ - 8 Days post Application (Source: Cotton Defoliation Evaluation Trial Report – Neels Van Rensburg Kapun – Dalby, Queensland (March 2014).

# LARGE SCALE DEMONSTRATIONS

During the last few seasons, SACOA engaged independent collaborators to conduct a number of large scale demonstration trials to showcase the use of our defoliation products ENHANCE™ and CROPSHIELD™.

From Emerald to Hay, whether applied by air or ground, our products performed as well and in many cases were superior to other commonly used products.



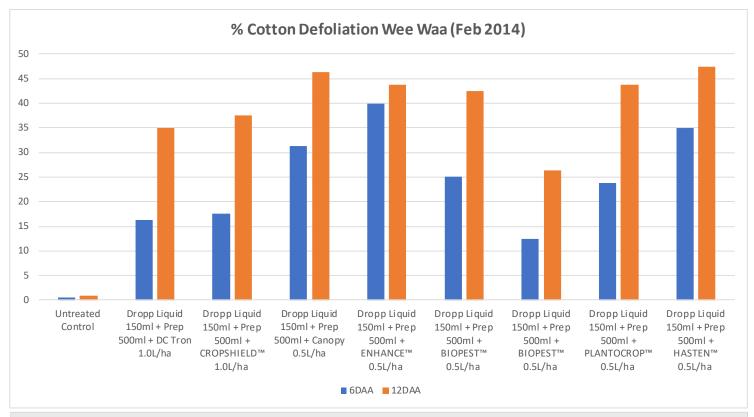
Image 3: ENHANCE™ - Day 5 post Application one (Ground). ENHANCE™ (Left) - CANOPY (Right) (Source: CGS 2013 Defoliation Report – Claire Welsh – Goondiwindi, Queensland (March 2013).

- ✓ Specialist compary
- QA manufacturing
- ✓ National distribution
- ✓ Full product support



#### REPLICATED TRIALS

SACOA has engaged independent research companys to carry effectivement of our defoliation products ENHANCE™ and CROPSHIELD™.



Graph 1: Cotton Defoliation Percentage 6 and 12DAA. Higher emulsifier loaded products like ENHANCE™ facilitate rapid defoliation versus other standards. Source: Kalyx KA14-141 - Wee Waa (April 2014)

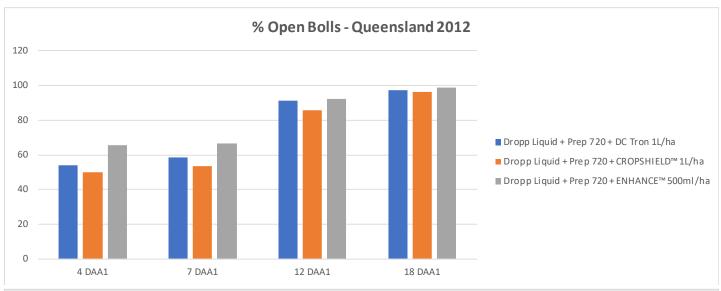
## CROPSHIELD™ PRODUCT OVERVIEW

Trials conducted on dryland and irrigated cotton crops over the many years have all shown that CROPSHIELD™ performs equally as well as current defoliation oils such as DC-Tron Cotton®, ENHANCE™. CROPSHIELD™ has been trialled with Dropp Liquid®, Dropp UltraMax® and other Thidiazuron defoliation products.

- 1 L/ha rate in combination with registered cotton defoliants.
- Compatible with Dropp Liquid® and Dropp UltraMax®.
- Compatible with Prep®.
- Field tested for both dryland and irrigated crops.
- Emulsifiable, narrow range petroleum spray oil.
- Active constituent 838 g/L petroleum oil.
- · Cost competitive when compared to other equivalent products on the market.
- Available in bulk 1000L, 205L or 20L containers to suit all requirements, minimising surplus at the end of the season.
- Full supported by SACOA's dedicated specialist team.



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Graph 2: ENHANCE™ proved more effective for rapid boll opening. CROPSHIELD™ proved equivalent to DC-Tron®. (Source: Griffiths Agriculture SAC12LB235 Brymaroo QLD - March 2012)

### ENHANCE™ PRODUCT OVERVIEW

ENHANCE™ is a highly refined paraffinic oil with non-ionic surfactants. It has been developed through extensive research for use as a quality oil at cotton defoliation at half the rate of DC-Tron Cotton® or other similar products.

- Premium crop oil concentrate.
- Premium cotton defoliation aid.
- Used at 0.5L/ha for defoliation.
- Endorsed by Bayer for use with Dropp Liquid®, Dropp Ultra Max® and Prep® and will be supported by Bayer in the field.
- Can be used for both aerial and ground rig application.
- Made in Australia for Australian conditions.

- · Can reduce the potential of clogging or blockage of spray nozzles.
- After defoliation is over, ENHANCE™ can be used as an adjuvant with a number of herbicides during allow or crop weed control.
- Rate of 0.5 1L/ha when used as a herbicide adjuvant.
- · Superior droplet control of herbicides by altering the spray solution characteristics.

- Offering extreme stability under low water rates.
- Increasing the amount of canopy deposition by the applied spray.
- · Increasing coverage by modifying the surface characteristics of plant cuticular wax.
- Enhancing the degree and rate that some pesticides are absorbed by plant tissue, even in dry conditions.

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COTTON DEFOLIATION - PROTECTING YOUR INVESTMENT IN YIEL

Version 3 | Date Nov 2020 | Ref 66 | Page 4

### **REFERENCES**

- CGS 2013 Defoliation Report
   Claire Welsh Goondiwindi,
   Queensland (March 2013)
- Cotton Defoliation Evaluation trial Report – Neels Van Rensburg Kapun - Dalby, Queensland (March 2014)
- Griffiths Agriculture SAC12LB235
   Brymaro, Queensland (March 2012)
- Kalyx KA14-141 Wee Waa, NSW (April 2014)

# **FIND OUT MORE**

Further information is available at www.sacoa.com.au or by contacting SACOA on 08 9386 7666 or contact your local SACOA representative;

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✓ Full product support

