

**Emerging Technologies LATMC –
Halex GT™ - Sorghum, Lumax™- Sugarcane,
Elatus™, Trivapro™, Vibrance in Rice™,
Avicta Elite Cotton Plus Vibrance™, Amistar Top™
SMOC/Dicamba**

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Halex GT® for Preemergence use in Grain Sorghum

Fed Reg – Dec 2016, waiting on State Labels

- **Mesotrione (3.3 floz) + S-Metolachlor (1.1 pts) + Glyphosate (27 floz)***
- **Use rate**
 - **4.0*** to 6.0 pt/A (can be applied by air in LA, MS, AK)
- **Target use**
 - Burndown prior to sorghum emergence to control
 - Annual Grasses/Broadleaves, Waterhemp and Palmer Amaranth
- **Sorghum seed safener is required**
 - Concep treated seed only

*Halex GT may not be registered for sale or use on grain sorghum in all states or counties. Please check with your local extension service to ensure registration status



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Halex GT[®] Adjuvant recommendation for burndown Weed Control in Grain Sorghum

- **Additives**

- Nonionic surfactant (NIS) at 1-2 qt/100 gallons of water (0.25-0.5% v/v) to the spray solution
 - Use the higher rate of NIS when weeds are growing under stress conditions (e.g. cool temperatures, dry weather, etc.)
- Spray grade ammonium sulfate (AMS) at 8.5-17.0 lb/100 gal water
 - When using liquid AMS products, use a rate that delivers an AMS equivalent of 8.5-17.0 lb/100 gallons of water.

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Lumax EZ[®] in Sugarcane

- Federal Registration – October 2017*
- Pre and Post Emergence use in Sugarcane
- Mesotrione (the active ingredient in **Callisto[®]**)
 - Unprecedented broadleaf weed control
- S-Metolachlor (the active ingredient in **Dual Magnum[®]**)
 - Season-long, residual grass control
- Atrazine (the active ingredient in **Aatrex[®]**)
- Weeds: Nightshade, Ryegrass (fall); along with other grasses and broadleaves



Lumax EZ[®] in Sugarcane (Crop Use)

Proposed use directions

- **Application Timing**
 - broadcast as a preplant, preemergence, postemergence or preplant/preemergence followed by postemergence
- **Preemergence (crop): 2.75 – 3.75 qt/A***
- **Postemergence: 1.5 to 3.0 qt/A***
- **Adjuvant:** If weeds are emerged
 - + COC at 1% v/v (1 gallon/100 gallon)
 - or a NIS at 0.25% v/v (1 quart/100 gallon) to the spray solution.
 - In addition to COC or NIS, a spray grade UAN (e.g. 28-0-0) at a rate of 2.5% v/v (2.5 gal/100 gal spray solution) or ammonium sulfate (AMS) at a rate of 8.5 lb/100 gallons of spray solution can be added to the spray solution.
- **Maximum of 5.25 qt/A/season in no more than 2 applications***
- **Do not apply more than 3.0 qt/A postemergence before sugarcane is 60" tall***
- Can tank mixed with other registered sugarcane herbicide, insecticide, and fungicides
- PHI = 100 days
- GPA = Ground (10-15 gal/A min)

Fall Applied Lumax EZ @ 3.25 qt/A on Ryegrass Control



Lumax EZ @ 3.25 qt/A applied 11/16;
picture taken 1/17

Check





Elatus™ *Disease Control and Crop Enhancement in Cotton*



- Elatus:** Solatenol™ (Benzovindiflupyr)(SDHI) + Azoxystrobin
Quick dispersing Dry flowable – 18.0 lb. bags
- Application:** Early season (1-4 leaf)
and /or
In season (first bloom to peak bloom fb 14-21 day later)
- Application rate:** 5.0 – 7.3 oz. Maximum of 14.6 oz/season. 45 day PHI
- Key Diseases:** Rhizoctonia, Ascochyta blight, Rust, Target spot, Alternaria
- Elatus:** 2 modes of action - efficacy and resistance management
Enhanced activity against Target spot
Extended residual activity
Crop enhancement – stress mitigation
- Components:** 5.0 oz Elatus = 5.8 oz Quadris + 0.0469 lbs AI Benzovindiflupyr
7.3 oz Elatus = 8.2 oz Quadris + 0.068 lbs AI Benzovindiflupyr



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Cotton Fungicide Demo Trial
Leachville, AR – 2016, Hawkins Farms
Untreated vs. Elatus, 6.0 oz Sequential
Sep 14
DPL 1518 B2XF



Untreated: 1454.7 Lbs. Lint/A

**Elatus, 6.0 oz Sequential: 1556.5 Lbs/Lint/A
(+101.8)**

Cotton Fungicide Demo Trial
MS County, AR – 2016, Wildy Farms
Untreated vs. Elatus, 6.0 oz Sequential
Aug 24
DPL 1518 B2XF



Untreated: 1093.8 Lbs. Lint/A



Elatus, 6.0 oz Sequential: 1219.2 Lbs Lint/A
(+125)



Trivapro™

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Pre-Mix contains at a use rate 13.7 fl oz/A

Benzovindiflupyr (SDHI Group 7)	= 4 oz
Propiconazole (Group 3)	= 4*oz
Azoxystrobin (Group 11)	= 6 oz

Trivapro™ Trivapro Use in Corn (Field/Sweet)

- **Disease controlled:**

- Anthracnose, Gray Leaf Spot, Tar Spot
- Northern Corn Leaf Blight
- Common & Southern Rusts

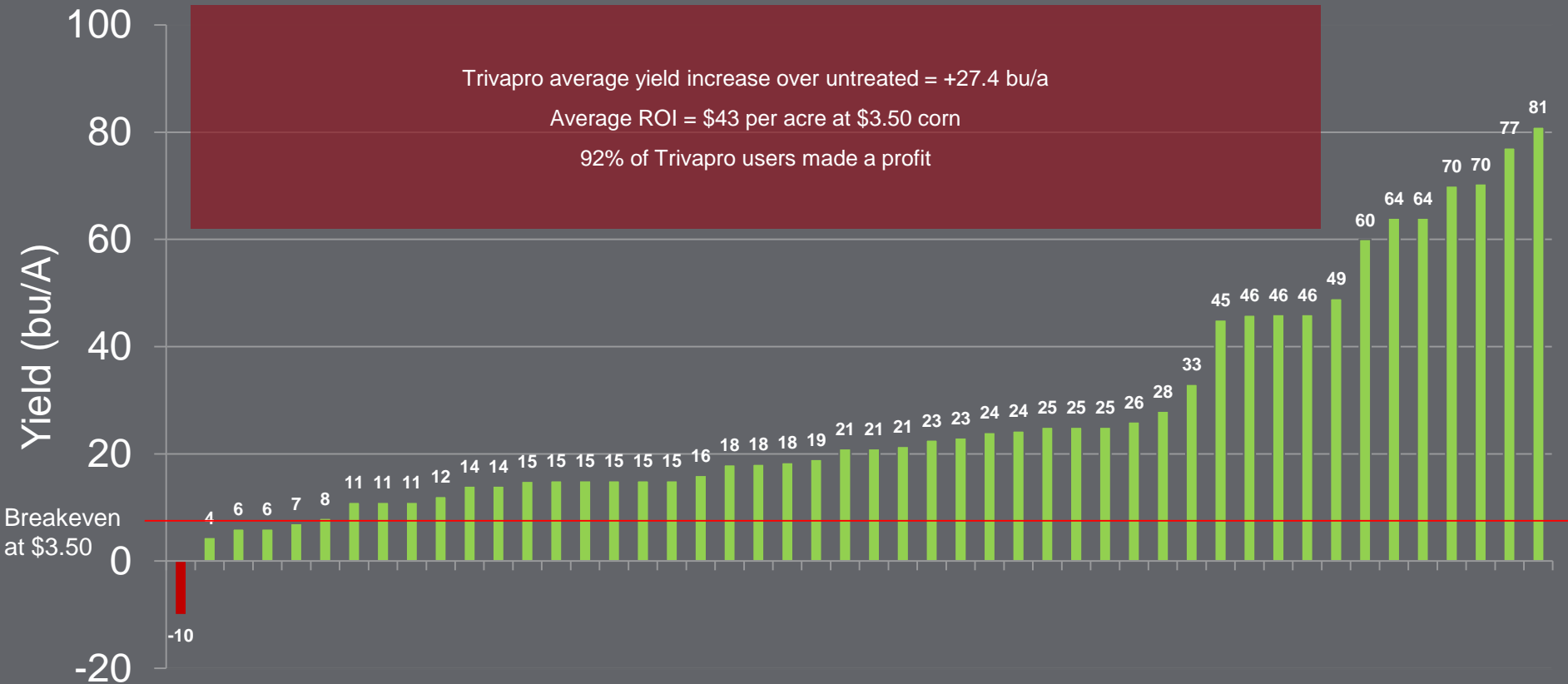


- **Application Timing**

- Corn (Field): V4-V8 (can be Tank-mixed with Halex GT, Callisto Xtra)
and/or
- Later at VT (tasseling) - R1 silk emergences

- **Use rate:** 13.7 floz/A **Maximum of 47.0 floz/A/season**
- **PHI** = 30 days (field); 14 days (sweet corn ears)
- **GPA** = Ground (10 gal/A min) and air (2 gal/A min)

Trivapro performance summary (R1)



Trial Information: Data from 48 non replicated hybrid/locations

Application Rates and Timing: 4.1 oz/A Trivapro A and 10.5 oz/A Trivapro B, applied at R1

ROI calculation based on commodity price of \$3.50/bu corn, Trivapro cost of \$17/acre and \$10 R1 application cost.

Product performance assumes disease presence.

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Trivapro Use in Soybean

- **Disease controlled:**
 - Aerial Web Blight (resistance)**
 - Alternaria, Anthracnose, Cercospora, Frogeye Leaf Spot,
 - Pod/Stem Blight, Powdery Mildew, Soybean Rust, Target Spot
- **Application Timing**
 - (Except Soybean Rust): R3 growth stage (early pod set);
 - Soybean Rust may begin at R1
- **Use rate**
 - 13.7 floz/A/single app and 42.0 floz/A/max total/year
 - Ground (10 gal/A min) or Air (2 gal/A min)
- **PHI = 30 days**

Trivapro Use in Wheat

- **Disease controlled: (Not control FHB)***
 - Septoria Leaf/Glume Blotch, Tan Spot, Powdery Mildew, Helminthosporium Leaf Spot, Stripe/Common Rusts
- **Application Timing:**
 - Prior to/or at flag leaf emergence
- **Use rate**
 - 13.7 floz/A/single app
 - 20.7 floz/A/max total/year
 - Ground (10 gal/A min) or
 - Air (2 gal/A min)
- **PHI = 30 days**





with



Top performing Cotton seed treatment with excellent seed safety
Broad spectrum early season nematode, insect and disease protection



Unsurpassed early season nematode protection!



Broad spectrum seed and seedling disease control



2 insecticides for early season insects including Tobacco thrips



Outstanding early post-emerge Rhizoctonia Sore Shin activity with enhanced root health and development

AI breakdown:

Abamectin +

Azoxystrobin + Fludioxonil + Mefenoxam + Sedaxane

Thiamethoxam + Imidacloprid

USSB0U0012016 - Efficacy of New A20703C Formulation in Combination with Imidacloprid on Early Season Insects in Cotton

Untreated Check



Avicta Duo COT 202



Cruiser



Avicta Elite



Gaucho



Aeris





Cotton Seedcare – 2016
Bay, AR Grow More Experience Site
Planted May 7. Photos Jul 20
Phytogen 499 WRF



**Base-M factory treated +
Avicta Elite Cotton Plus with Vibrance**



Base-M factory treated



+



EPA Reg. Expected: 10/4/2017

Key features

- 4 active ingredients
 - 1 INS (thiamethoxam)
 - 3 FUN, incl sedaxane
- EPA-approved pre-mix formulation
- Red color

Key benefits

1. **Increased yield potential** from protection against all main early-season diseases and insects
2. **Higher tolerance of crop stress** through optimized root health and plant vigor
3. **Time gain** from reduced pest scouting and replants
4. **Reduced complexity (costs)** of treating operations with stable, low use rate pre-mix formulation
5. **Recognition for high-quality** treatment supported by the proven and trusted CruiserMaxx brand

AI breakdown:

Fungicides: Azoxystrobin + Fludioxonil + Mefenoxam + Sedaxane

Insecticides: Thiamethoxam



USSB0T1032016 – Efficacy of CruiserMaxx Rice Plus A16148C for Early Season Diseases in Rice
Demonstrated effectiveness of the AG-11 *Rhizoctonia solani* isolates in rice stand reduction

1 June

15 June

8 July

Rhizoctonia solani-Inoculated
Check



Rhizoctonia solani-Inoculated
CruiserMaxx Vibrance Premix



Amistar® Top Fungicide for Rice

Federal Registration Expected May/June 2017*

Range: 10 – 15 fl oz/A

***Rate: 14 fl oz/A:** AZO = 11.2 floz/A and DFZ = 7.0 floz/A = At Boot

Diseases Controlled:

Sheath Blight, Stem Rot, Brown Leaf Spot, Blast, Leaf Smut, Narrow Brown Leaf Spot

“Good activity against strobi (Grp11) resistant Rhizoctonia and is active against SDHI (Grp7) reduce sensitive Rhizoctonia” Dr. Don Groth

Maximum Number of Applications: 2

Re-treatment Interval: 14 day

PHI: 28 day

Maximum total use per season: 30 fl oz/A



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UTC



Amistar Top 14 floz/A



UTC



Amistar Top 14 floz/A

A21472C - A New Premix Under Development from Syngenta

- Combination of S-metolachlor and Dicamba
 - Low volatility formulation that contains VaporGrip™ Technology
- Effective for pre-plant/at-plant/pre-emergence burndown or early post-emergence applications
- Designed to deliver post-emergence and residual activity
- Future labeled crops: dicamba-tolerant soybean and dicamba-tolerant cotton



A21472C - Proposed Use Directions For Soybean and Cotton

- Product use rate: 56.5 fl oz/A = Max amount per year 113 fl oz/A

A21472C Application Rate	S-Metolachlor Rate	Dicamba Rate
56.5 fl oz/A	1.0 lb ai/A	0.5 lb ae/A

- Maximum 1 application pre-plant/at-plant/pre-emergence plus 1 application post-emergence per year
- Use as part of a program approach with an effective, multiple site-of-action pre-emergence residual herbicide
 - i.e. Boundary[®], BroadAxe[®] XC or Prefix[®]

Summary of What is Coming from Syngenta

- Halex GT pre in Grain Sorghum **(Waiting on State Label)**
- Lumax EZ Pre/post Sugarcane **(Fall - 2017)**
- Elatus for Target Spot in Cotton **(Registered)**
- Avicta Elite plus Vibrance – Cotton – Stand, thrips **(Registered)**
- Cruiser Maxx Rice + Vibrance – Disease, “Drift Safening” **(Fall - 2017)**
- Amistar Top – Rice - Sheath Blight, Blast, Smut **(May/June- 2017)**
- SMOC/Dicamba - Soybean and Cotton **(Spring 2018)**

Legal

Product performance assumes disease presence.

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Some seed treatment offers are separately registered products applied to the seed as a combined slurry. **Always read individual product labels and treater instructions before combining and applying component products.** Trivapro is sold as a combination of separately registered products: Trivapro A and Trivapro B fungicides. Orondis Opti is a combination of separately registered products: Orondis Opti A and Orondis Opti B. Orondis Gold is a combination of separately registered products: Orondis Gold A and Orondis Gold B. Orondis Ultra is a combination of separately registered products: Orondis Ultra A and Orondis Ultra B.

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