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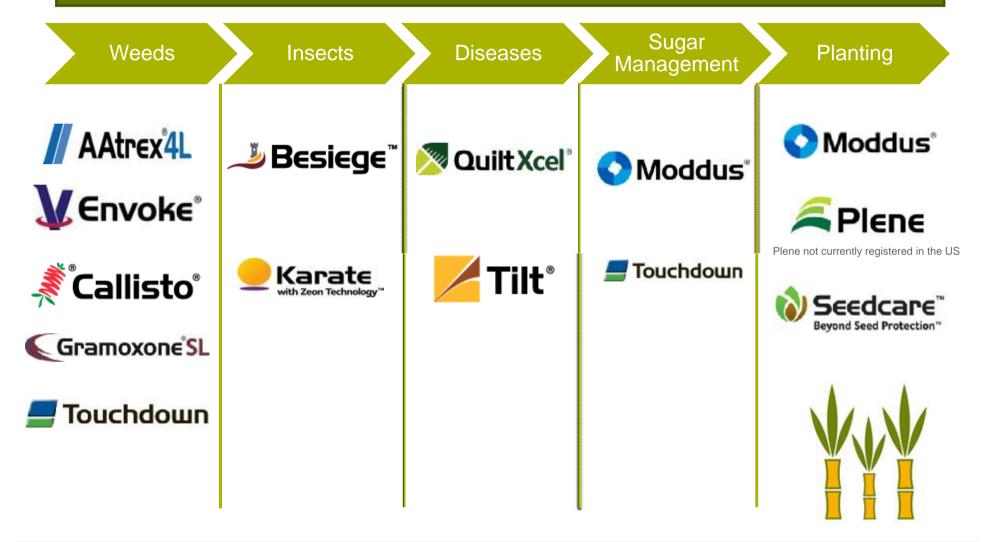
Sugarcane Update

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ASR and Territory Sales Rep

Classification: INTERNAL USE ONLY

Only Syngenta can offer integrated crop solutions for sugarcane



Gramoxone SL, Aatrex, Karate, and Besiege are restricted use pesticides

Moddus, Quilt Xcel, Tilt, Plene are not currently registered for use or sale on sugarcane in all states. Please check with your state or local extension service before buying or using this product.



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Why the name change?

- Moddus is the trade name in South America where the product has been used very successfully for several years and Syngenta wanted to keep the brand consistent
- Syngenta wanted to differentiate Moddus in sugarcane from Palisade in the grass seed and cereal markets



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Moddus is not currently registered for use or sale on sugarcane in all states. Please check with your state or local extension service before buying or using this product. CLASSIFICATION: PUBLIC— not for distribution



Features and Benefits



Trinexapac-ethyl, the active ingredient in Moddus, is a foliar absorbed plant growth regulator (PGR)

- **P** Inhibits gibberellic acid (GA), a plant hormone responsible for cell elongation
 - **§** Shortens internodes to reduce crop height
 - § Improves stalk strength resulting in improved standability which mitigates risk from adverse weather
- **Boosts sugar yield without reducing cane yield**
 - **§** In 86% of trials had an increase of 10+ lb./ton when compared to UTC

${\rm P}$ $\,$ Flexible application window: 28 to 60 days prior to harvest

- **§** Helps growers manage spray programs (timing, cost efficiency) and provides flexibility under adverse weather conditions
- ${\bf p}$ $\,$ No residual effect on subsequent ration crop $\,$
- **p** Improves harvest efficiency
 - § Ease of harvest because of improved standability
- ${\bf p}$ $\,$ Will be labeled on plant cane through final ration
- **Stimulates root growth** (Brazilian observations)
 - § Better water and nutrient use efficiency

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Use Recommendation to Manage Growth and Sugar Yield





Crop	Use Rate (fl oz/A)	Use Recommendation
Sugarcane	11 - 19	Apply Moddus 28-60 days prior to harvest to increase sugar yield and/or extend harvest window.

Specific Use Restrictions

1) When applied as a ripener, Moddus may be applied until 28 days prior to harvest (28-day PHI).

2) Do not apply more than 19 fl. oz. Moddus per acre per crop season.

3) Do not apply to cane under stress from lack of water, poor fertilization, abnormal temperatures, or disease.

4) Results may vary according to the variety.

5) Crop tolerance: Moddus has been shown to be safe at the rates, timings, and varieties tested. Some varieties may be more sensitive and exhibit symptoms such as stunting. Under normal agricultural conditions, the affected plant will resume growth.

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In Summary



- There will be a learning curve with Moddus. We do not have all the answers at this time (application timing, varietal response, etc)
- Moddus is not glyphosate. The greatest return on investment may not be seen on the first season, must view as a total return on investment over the entire crop cycle
- Moddus provides much more application flexibility and crop safety than glyphosate



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Plant Performance for Sugarcane

Quilt Xcel is not currently registered for use or sale on sugarcane in all states. Please check with your state or local extension service before buying or using this product.



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PlantPerformance

Have acquired Federal registrations for Quilt Xcel, Quadris, and Tilt. State registrations for use in sugarcane are pending but are expected soon.



Quilt Xcel will be our lead brand in the sugarcane market



- The Power of Two modes of action to help with resistance management
- Excellent activity against Brown Rust and Orange Rust



Quilt Xcel, Quadris, and Tilt are not currently registered for use or sale on sugarcane in all states. Please check with your state or local extension service before buying or using this product. CLASSIFICATION: PUBLIC— not for distribution







DIRECTIONS FOR USE

Сгор	Target Diseases	Use Rate fl. oz. product/A (Ib. a.i./A)	Remarks	
Sugarcane	Brown Rust (<i>Puccinia melanocephela</i>) Orange Rust (<i>Puccinia kuehnii</i>)	16 - 22	Begin applications prior to rust development and continue throughout the season every 14-28 days following resistance management guidelines. Scout fields and begin applications at the earliest sign of rust. Applications may be made by ground, air or chemigation.	

Specific Use Restrictions:

- Do not apply more than 88 fl. oz./A/season of Quilt Xcel. .
- Do not apply within 30 days of harvest (30-day PHI).
- Do not apply more than 0.80 lb. a.i. of azoxystrobin-containing products per season. .

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Besiege for Sugarcane



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Besiege is a Restricted Use Pesticide.

Besiege is not currently registered for sale or use in all states.

Classification: Public

Technical Overview

Сгор	Pest	Rate Per Acre Per Application
	Mexican rice borer ¹	8.0 – 10.0 fl. oz./A
Sugarcane	Pygmy mole cricket	
	Rice stalk borer ¹	
	Sugarcane aphid ³	
	Sugarcane beetle (adult) ²	
	Sugarcane borer ¹	
	West Indian canefly	
	Yellow sugarcane aphid ³	

Besiege			Prevathon	Karate with Zeon Technology
Rate (oz)	CTPR (lbs ai)	LCY (Ibs ai)	Rate	Rate
5	0.033	0.016	NR	1.0
6	0.039	0.019	NR	1.2
7	0.046	0.023	13.6*	1.4
8	0.052	0.026	15.5	1.6
9	0.059	0.029	17.5	1.8
10	0.065	0.033	19.4	2.0
11	0.072	0.036	21.3	2.2
12	0.078	0.039	23.3	2.4



- Contains two active ingredients, chlorantraniliprole and lambdacyhalothrin
- Excellent knockdown and longlasting residual control of difficult lepidopteran pests
- Multiple modes of action provide insect pest control by contact, ingestion and ovicidal action

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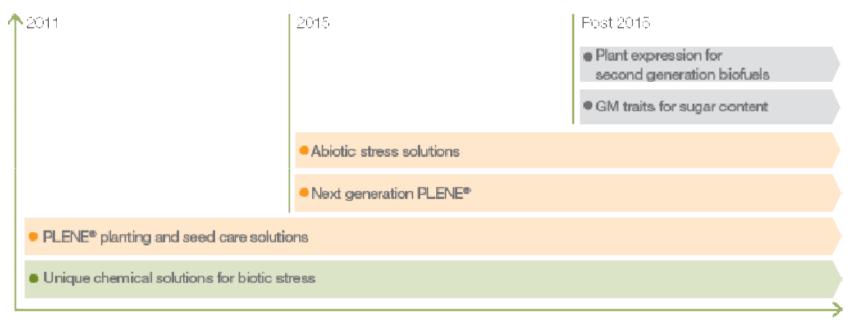
Besiege and Karate with Zeon Technology are Restricted Use Pesticides. Besiege is not currently registered for sale or use in all states.



Syngenta Sugarcane Pipeline



Sugar cane pipeline highlights



Bringing plant potential to life



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- Important: Always read and follow bag tag and product label instructions before buying and using Syngenta products. The instructions contain important conditions of sale, including limitations of warranty and remedy.
- All crop protection products and seed treatments may not be registered for sale or use in all states or counties. Please check with your state or local extension service before buying or using these products or product combinations.
- AAtrex 4L, AAtrex Nine-O, Agri-Flex, Agri-Mek 0.15EC, Agri-Mek SC, Avicta 500FS, Avicta Duo Corn, Avicta Duo 250 Corn, Avicta Duo Cotton, Besiege, Bicep II Magnum, Bicep II Magnum FC, Bicep Lite II Magnum, Callisto Xtra, Clinch, Curacron 8E, Cyclone Star, Denim, Endigo ZC, Endigo ZCX, Epi-Mek 0.15EC, Expert, Force 3G, Force CS, Force ST, Gramoxone Inteon, Gramoxone SL, Karate with Zeon Technology, Karate EC, Lamcap, Lexar, Lumax, Proclaim, Voliam Xpress, Warrior II with Zeon Technology, Warrior with Zeon Technology, Zephyr 0.15EC are Restricted Use Pesticides.
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- Crops or other materials produced from Agrisure Corn Traits products can only be exported to, used, processed and/or sold in countries where all necessary regulatory approvals have been granted.
- Actara, Agri-Mek, Agri-Mek 0.15EC, Besiege, Centric, Centric 40WG, Curacron, Curacron 8E, Denim, Durivo, Endigo, Endigo ZC, Karate with Zeon Technology, Karate, Platinum, Platinum 75SG, Proclaim, Voliam Flexi, Voliam Xpress, Warrior, Warrior II, Warrior with Zeon Technology, and Warrior II with Zeon Technology are highly toxic to bees exposed to direct treatment or to residues on blooming crops and weeds. Do not apply these products or allow them to drift onto blooming plants if bees are foraging in the treated area.
- 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.
- Performance evaluations vs. competitive products are based solely upon interpretation of publicly available information, including public presentations, regulatory submissions, and observations made in commercial fields.

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