



FMC 2007 Product Update

The Journey Forward

Rusty Mitchell

Technical Support – Delta Region

FMC

Agricultural Products Group







New Burndown Herbicide

New Rage herbicide provides the fastest control of the broadest spectrum of weeds for burndown in row middles

- Tree and vine crops
- Active ingredient: glyphosate + carfentrazone
- Rage has both systemic and contact activity
- Rage has less crop and application restrictions compared to glyphosate and 2,4-D premixes
- The two modes of action in Rage make it an ideal resistance management tool
- EPA label pending



Rage 3.7 EW

***Roundup
Weathermax***



7 – 14 days after treatment



New Burndown Herbicide



*Rage D-Tech herbicide provides complete,
consistent burndown in soybean and corn fields*

- **Active ingredient: 2,4-D + carfentrazone**
- **Provides excellent control of tough weeds using the power of two active ingredients**
- **More consistent control on a broader spectrum of weeds compared to 2,4-D**
- **Faster activity and more complete control than 2,4-D alone**
- **Best burndown product available for marestail control**
- **EPA label pending**



New Herbicide

- **Active ingredient: sulfentrazone + cloransulam-methyl**
- **Preemergence herbicide for soybeans**
- **Base for glyphosate problem weeds - lambsquarters, waterhemp, marestail, ragweeds**
- **3.2 oz/acre use rate with RR programs**
- **70DF formulation**



New Fungicide

New Ranman fungicide, with its unique mode of action, provides highly effective prevention of key diseases in potato, tomato and cucurbit crops

- **Active ingredient: Cyazofamid**
- **FRAC class group 21 fungicide, unique (alone) class**
- **Potatoes, tomatoes, cucurbits**
- **Late blight – potatoes, tomatoes**
- **Downy mildew – cucurbits**
- **Pink Rot - potato**




Brigade[®] 2EC
Insecticide/Miticide



New Tradename

- **Active ingredient: bifenthrin**
- **Lower cost for foliar insect control markets**
- **EPA label pending for other crops**
 - Peas/Beans (dried, shelled) crop subgroup
 - Tuberous and Corm Veg. subgroup (potato)
 - Leafy Brassicas
 - Tobacco
 - Okra
 - Fruiting Veg. crop group
 - Soybean 2008
 - Peanuts 2008
 - Root vegetables 2008



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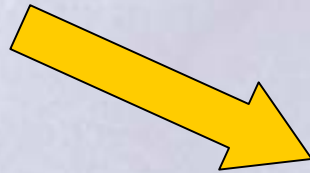


HERO 
INSECTICIDE

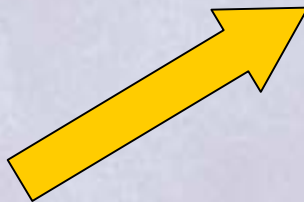
- **1.24 lb EC**
- **Zeta-cypermethrin: bifenthrin (1:3 Ratio)**
- **Signal Word – CAUTION**
- **REI 12 hours**
- **Application rates: 0.025 – 0.10 lb ai/A (2.6 – 10.3 oz)**
- **Contains those crops currently registered and common to both active ingredients**
 - **New crops added as tolerances obtained**
- **Contains most restrictive PHI, re-treatment interval, etc., between each AI**



Bifenthrin
Residual, Pest
Spectrum



Zetacypermethrin
Quick knockdown,
Pest Spectrum



Residual,
Knockdown,
Greater Pest
Spectrum,
Caution Label

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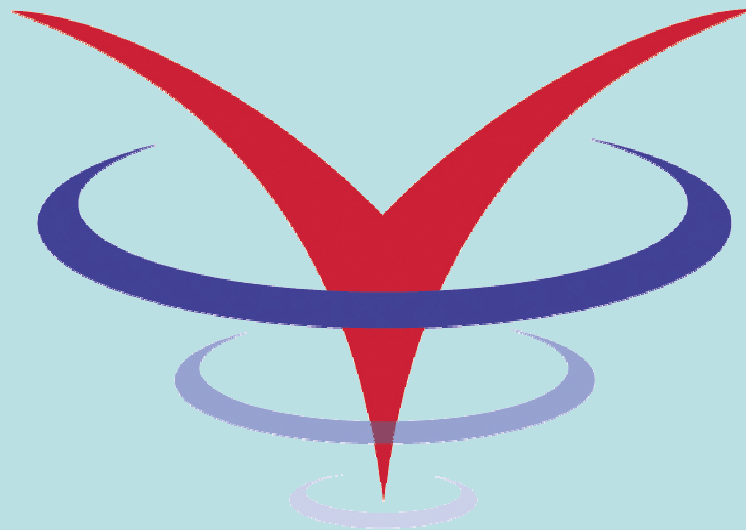
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New Insecticide

Unique mode of action, provides long-lasting control of aphids for higher quality fruit and vegetable crops

- **Active ingredient – flonicamid**
- **Aphid control**
- **Beleaf has no known cross resistance with other insecticides**
- **Anti-feeding effect that protects plants – you begin to see them stop feeding in 30 minutes**
- **Irreversible feeding cessation leads to higher quality crop yields**
- **A key component of Resistance Management programs**
- **Easy on beneficials**



CARBINE™

INSECTICIDE

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A New Way to Maximize Cotton Yield

- Carbine 50WG – 50% water dispersible granular formulation
- Packaging Units: 4 X 3.5 lbs
- Recommended Use Rates:
 - Aphids 0.044 – 0.088 lb ai/A (1.4 – 2.8 oz/A)
 - Tarnished Plant Bug 0.053 – 0.088 lb ai/A (1.7 – 2.8 oz/A)
 - Western Plant Bug
 - Cotton Fleahopper
- 30 day PHI
- 12 hour REI
- Do not apply more than 0.088 lb ai/A (2.8 oz/A) per application
- Do not apply more than 3 applications per season
- Do not exceed 0.267 lb ai/A (8.4 oz/A) per season

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Exceptional Insecticidal Attributes

Effective

Selective

- Aphids & *Lygus* spp.

Short PHI

- Cotton – 30 day

Short Re-entry Interval

- 12 hour REI

Unique Mode of Action

- Blockade of the A-Type potassium channel at the presynaptic terminal
- Manage Insecticide Resistance
- Results in rapid feeding cessation (within one hour), mortality within
- 2-5 days

Excellent Formulations

- 50 WG

Low Ecological Impact

Minimal Impact Beneficials

- Excellent IPM tool

Practically Non-Toxic

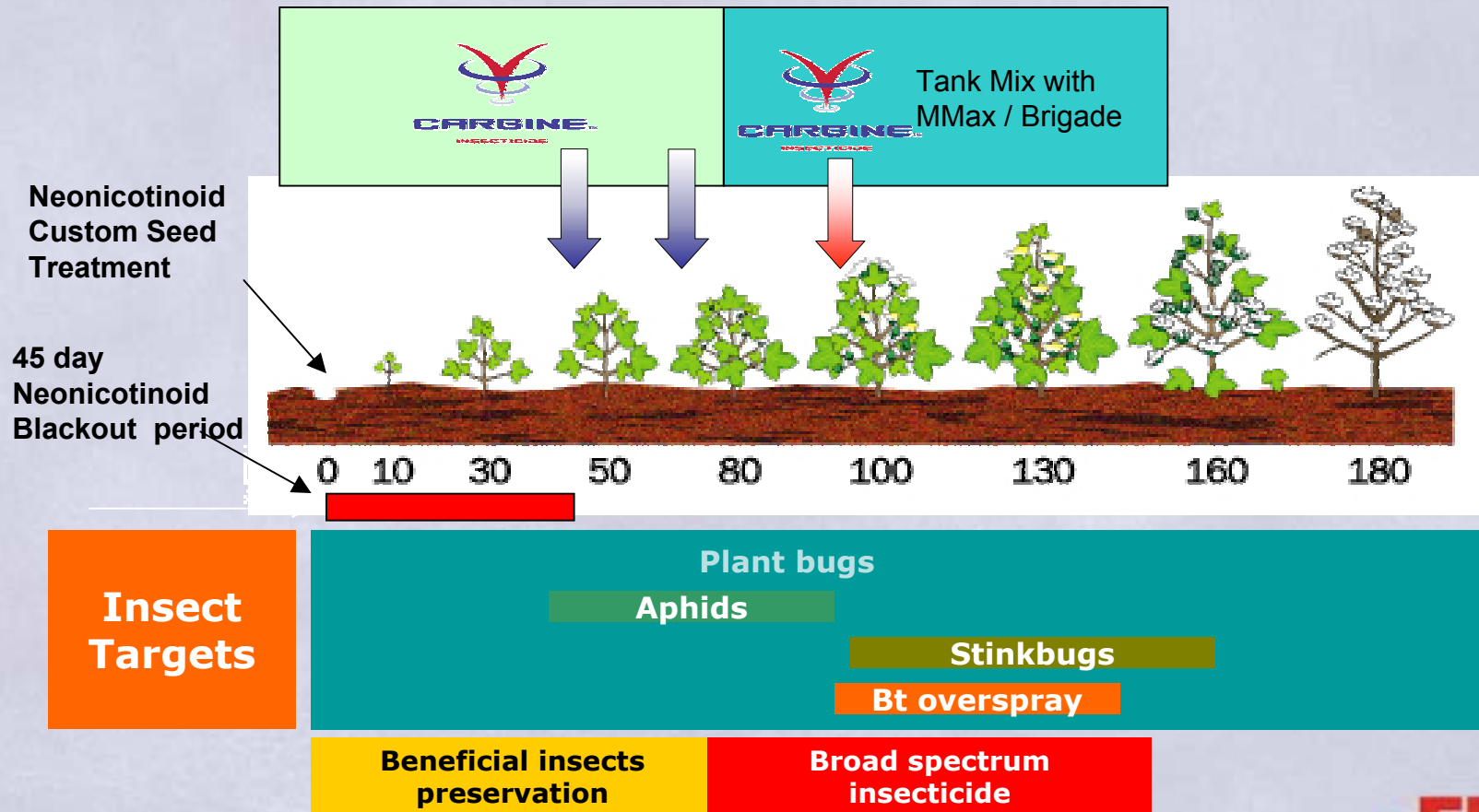
- Birds
- Fish
- Humans

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Carbine Technical Position





Thank You!

***Lester Scott & Henry Stefanski
RMMs***