



# Chemistries for Alfalfa Insect Pest Management

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# Alfalfa Aphid Complex

- Damage



- Sucking plant sap  
+
- injecting toxins  
+
- secreting honeydew



- Leaf curling, shortened internodes and yellowing
- Sooty mold reduces photosynthesis and quality



- Reducing growth and yield
- Plant death

# Alfalfa Aphids in the Southwest Desert

- **Pea aphid,**  
*Acyrtosiphon pisum*
- **Blue alfalfa aphid,**  
*Acyrtosiphon kondoi*
- **Cowpea aphid,**  
*Aphis craccivora*
- **Spotted alfalfa aphid,**  
*Therioaphis maculata*



# Active Ingredients for Aphid Control

- Pyrethroids



Lambda-cyhalothrin



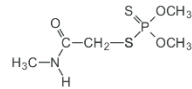
Zeta-cypermethrin



β-cyfluthrin

- Organophosphates

Dimethoate



- Sulfoxaflor (Transform)



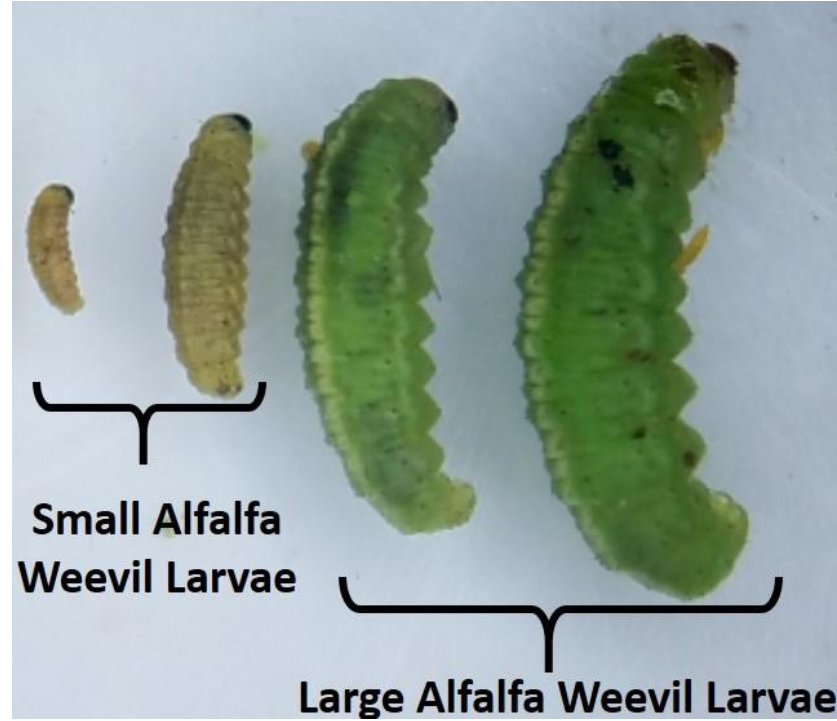
ISOCLAST<sup>™</sup> ACTIVE

- Butenolides (Sivanto) **SIVANTO<sup>™</sup>**

- TBR: Sefina, PQZ, Centric



# Damages & Management of Alfalfa Weevil



- Threshold of 1-4 large larvae / sweep
- Based on hay price, costs of application



# Active Ingredients for AW Control

- Pyrethroids



- Organophosphates



Chlorpyrifos

- Indoxacarb



- Other in the pipeline?



East  
Insect

Decem

L  
Insect

Mar



189 / 5 sweeps  
37.8 /sweep

25

20 25

3/9/2020



**WE NEED TO FIX THINGS.**



**OK, LET'S TAKE A SURVEY!**

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# Cultural Control

- **Cultural Control**
  - **Resistant Varieties**

- **Strip Cutting**



- **Early harvest**
- **Proper irrigation**





# Natural Enemies ... Your Friends in IPM





# ACKNOWLEDGEMENT

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- **Collaborators**

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- **Students**

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An aerial photograph of a vast, green agricultural field, likely corn, with distinct furrows running parallel across the landscape. The field is bordered by lighter-colored paths or roads. The word "Thanks" is superimposed in a large, 3D, metallic gold font at the top center.

# Thanks

**Take care  
and  
stay well!**