# New Product IR-4 Industry Technology Session

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# RevoCURB<sup>™</sup>

### **Botanical Oil-based Nematicide & Soil Disinfectant**



### **RevoCURB<sup>™</sup> - Alternative to Fumigation**





#### **BOTANICAL-OIL BASED 3-1 SOLUTION**

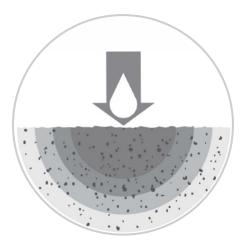
- Fungicide-bacteri cide
  - Nematicide
  - Herbicide



BROAD **SPECTRUM** 

- Contact
- Prevent, control and eliminate soil-borne pathogens and plant parasitic nematodes







#### **PRE-PLANT SOIL** TREATMENT

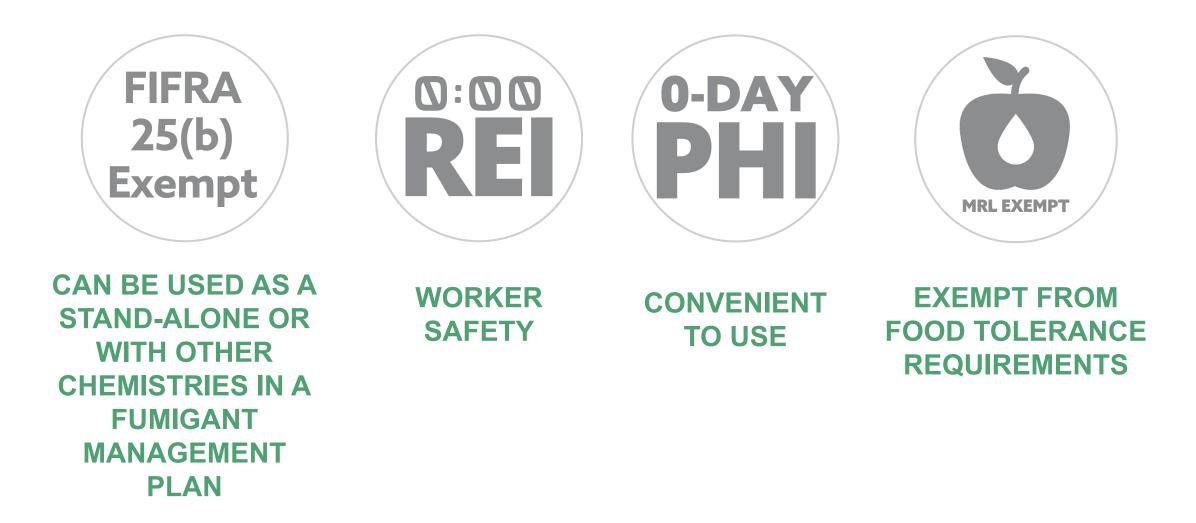
- Standard equipment
- Can be used as a standalone

#### BROAD **APPLICATION SITES**

- All commercial specialty crops
- Organic Crops













#### ENVIRONMENTALLY FRIENDLY

NO PHYTOTOXICITY OBSERVED AFTER PLANTING



### **Active Ingredients & Modes of Action**



### **ACTIVE INGREDIENTS**

- Thyme Oil .....
- Clove Oil .....
- Garlic Oil
- Cinnamon Oil .....

Botanical oils	Active compounds	МоА	Bactericide /fungicide	Nematicide	Herbicide	
Thyme oil	Thymol	Cell membrane disruption	$\checkmark$		$\checkmark$	
Clove oil	Eugenol	Cell membrane disruption	$\checkmark$	$\checkmark$	$\checkmark$	
Garlic Oil	Organosulfur	Repellency	$\checkmark$	$\checkmark$		
Cinnamon oil	Ethyl cinnamate, Cinnamaldehyde	Enhances other active ingredients		$\checkmark$	$\checkmark$	



7.00%
6.00%
4.00%
2.00%

### **Pre-plant Use Sites – All Agricultural Crops**

RevoCURB is intended for use on outdoor fields and rows including, but not limited to:



**BERRIES** 



**CITRUS** 



**LEAFY GREEN** 



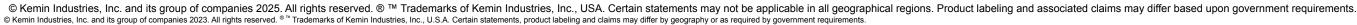


**NUTS** 





HOPS







**VEGETABLES** 



**VINEYARDS** 



**ORCHARDS** 



**GREENHOUSE & NURSERY** 

## **Application Rates**

This product is a concentrate and must be diluted before use.

### **REVOCURB REQUIRES A PREPLANT TREATMENT TIMING OF 14 DAYS**

	<b>APPLICATION RATES</b>
PREVENTATIVE	STANDARD APPLICATION
2.5-5 gallons per acre	5-15 gallons per acre

- This product can be used both as a preventive and curative agent.
- Apply at preventive rates on soils with low pest infestation.
  Use the mitigation rates for soils with heavy infestations, fields with a history of diseases, or when weather conditions are expected to favor rapid disease growth or nematode activity. When using the highest rates, additional preplant time greater than 14 days may be required. Consult your representative for further guidance on achieving the best efficacy as needed.

• Soil broadcast spray • Spray incorporated		SUGGESTED WATER VOLUME Min. of 300 gallons per acre	



#### MITIGATION/HEAVY SOIL INFESTATION 15-60 gallons per acre

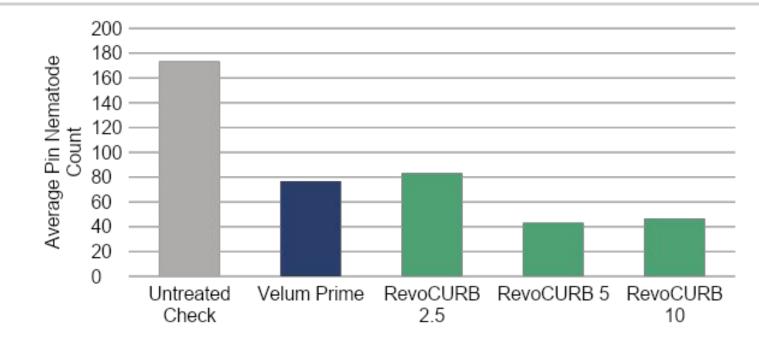
### SUPPLEMENTAL IRRIGATION

Irrigate with water to achieve 6-12 inches of treatment penetration into the soil

Irrigate with water to achieve 6-12 inches of treatment penetration into the soil

### **Current Trials**

Pest	Crop	Application Rates	Year
Nematodes	Potato & Onion	15-60 gal/ac	2023
Nematodes	Cucumber	2.5-15 gal/ac	2023, 2024, & 2025
Nematodes	Tomatoes	2.5-10 gal/ac	2024
Wireworm	Watermelon	2.5-15 gal/ac	2024
Bulkhulderia cepecia	Onion	15 gal/ac	2024/2025
Macrophomina	Strawberries	5 & 15 gal/ac	2024/2025



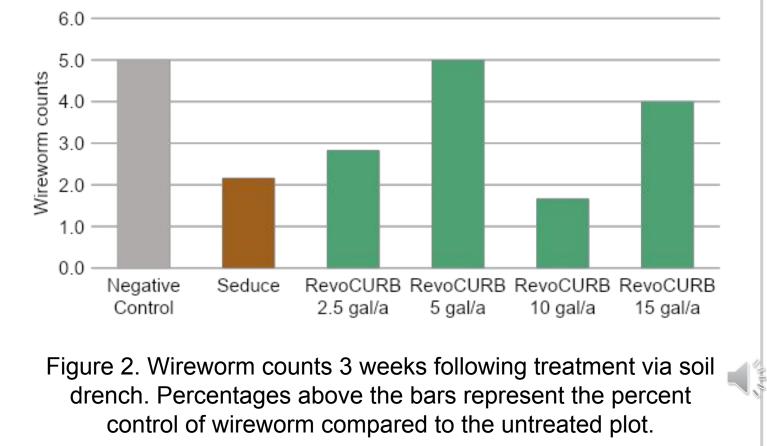


Figure 1. Pin nematode counts 14 days after soil pretreatment. Percentages above bars represent the percent control of pin nematodes compared to the untreated check.



### **RevoCURB** Trial Requests

Nematode Efficacy:

- Efficacy against a variety nematode species
  - Pin nematodes, Root-knot nematodes, Cyst nematodes, etc.
- Efficacy on a variety of crops

Pathogen Efficacy and Disease Incidence:

- Any soil-borne bacterial or fungal species
  - Neopestalotiopsis, Fusarium, Verticillium, Botrytis, Etc.
- Efficacy on a variety of crops

Pre-emergent herbicide Efficacy:

- Prevalent and troublesome weed species
  - Ragweed/Giant Ragweed, Marestail, Nutgrass, Hemlock, Dog phennel, Hen bit, Lambsquarters, Milkweed, Broadleaf, and Grasses, etc.

Insect Efficacy:

• Soil-dwelling insect species on a variety of crops



# New Product

## DEMISE

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## **Demise: Post-Emergent Organic Herbicide**

### Currently in late-stage development

### **BACKGROUND:**

- The herbicide will be FIFRA 25b exempt
- Expected benefits include 0 h REI, 0 d PHI, MRL exempt, & minimal PPE
- Smart Blend technology in a dry powder format
- Clove oil active ingredient
- Burn Down MOA
- Broad Use Sites All outdoor and indoor cropping spaces

### **APPLICATION:**

- Anticipated application rate: 2.5-10% (2.5-10 g/L) based on weed age and growth stage
- Avoid temps <70°F and rainfall for 24 hours</li>

### **TRIAL REQUESTS:**

• Testing on post-emergent weeds, especially difficult to kill varieties, both broad-leaf and grasses



# **Thank You!**





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