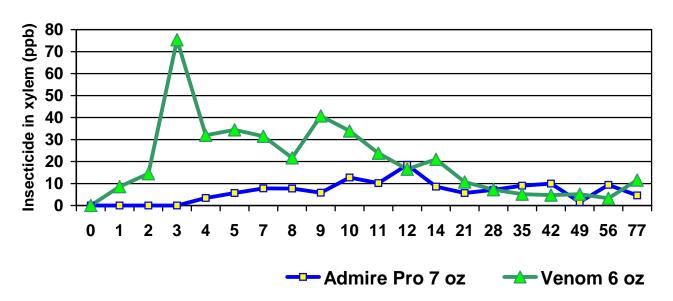
Grapes

Mealybug Control in Grapes

Venom[®] Insecticide strikes fast to take out even the toughest pests in grapes.

- **Super-systemic** *Venom* uptake from soil applications in grapes is faster than imidacloprid and is equally long-lasting.
- Available for root uptake in all soil types. "Dinotefuran did not become bound up in three soil types that represented the spectrum of soil types that occur in California vineyards." Byrne/Toscano, UC Riverside research report. 2007.
- **Effective**: Lab bioassays show *Venom* is slightly more toxic to vine mealybug crawlers than imidacloprid.

University Data Shows Outstanding Plant Uptake



Venom Is Toxic To Vine Mealybug

Dose response data for 1st instar Vine Mealybug treated with dinotefuran and imidacloprid. Bioassay data. LC data are expressed in units of ng insecticide per cm² leaf.

Insecticide	LC ₁₀	LC ₅₀	LC_{90}	n
Venom (dinotefuran)	0.38	7.5	150	154
Imidacloprid	1.00	27.0	716	135

"The bioassays showed that dinotefuran was slightly more toxic than imidacloprid." Byrne/Toscano, UC Riverside research report. 2007.



For Insect Control in Grapes: Grape mealybug, leafhoppers, thrips, glassywinged sharpshooter. Refer to 2(ee) for use instructions for vine and obscure mealybug, Phylloxera, grape berry moth and multi-colored Asian lady beetle.

	SOIL	FOLIAR	
Application Method	Chemigation	Air or Ground equipment	
Rate / Application	6 oz/A	1-3 oz/A. Use high rate under severe pest pressure, or where pest pressure is continuous.	
Timing	Between bud break and pea berry size.	Apply when pests appear. Repeat after 14 days if necessary	
Spray Volume	Apply in sufficient carrier volume to insure uniform application. Manage irrigation to prevent leaching.	Air: 3 – 10 GPA Ground: 20 – 50 GPA	
Maximum Applications / Season	1 application / season	Apply up to 6 oz/A per season	
Pre-Harvest Interval	28 days	1 day	
Restricted Entry Interval (REI)	12 hours		
Packaging	1 lb bottle (10 bottles/carton) & 5 lb bottle (4 bottles/carton)		
EPA Reg. No.	59639-135		

Other Important Information

Venom is toxic to bees when applied as a foliar treatment. Do not apply if bees are actively foraging in the treatment area. Impact to bees from soil applications of *Venom* is minimal. *Venom* is a selective insecticide and has minimal impact on beneficial insects.

Technical Background

Venom contains dinotefuran in a 70% a.i. water-soluble formulation. *Venom* is a third generation neonicotinoid insecticide, in IRAC Group 4A. *Venom* is super-systemic when soil applied, and has translaminar activity when applied to plant foliage.

