



## BLACK ROT CONTROL ON NIAGARA GRAPES WITH PREV-AM® ULTRA

<b>TARGET</b>	Black rot ( <i>Guignardia bidwellii</i> )	<b>CROP</b>	Grape, var. Niagara ( <i>Vitis labrusca</i> )
<b>TRIAL DATE</b>	April 2010	<b>LOCATION</b>	Fennville, MI, USA
<b>RESEARCHER</b>	A.M.C. Schilder, J.M. Gillett, & R.W. Sysak, MSU		

### APPLICATION

The trial was established in a 7-year old “Niagara” vineyard at the Trevor Nichols Research Complex in Fennville, Michigan. Experimental plots, each consisting of 7 vines spaced 6×10 ft., were replicated four times in a randomized complete block design. Treatments were applied by means of an R&D Research CO<sub>2</sub> cart-styled sprayer equipped with six bottles (0.8 gal each), a twin-gauge Norgren pressure regulator set at 55 psi and a single XR TeeJet 8002VS nozzle on a 5-ft. spray boom, delivering a final spray volume of 30 gal /acre.

Spray dates and approximate phenological stages were as follows: 1 · May 22: 1 inch shoot, 2 · June 1: 6 inch shoot, 3 · June 15: Immediate prebloom, 4 · June 27: 1st post bloom, 5 · July 11: 2nd post bloom, 6 · July 25: 3rd post bloom, 7 · August 8: 4th post bloom.

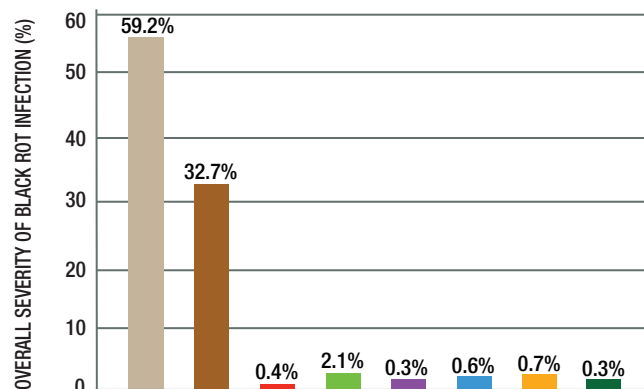
On 16 August, 25 clusters and leaves were randomly selected and assessed for downy mildew incidence and severity. Overall severity was calculated as (incidence×severity)/100.

### RESULTS

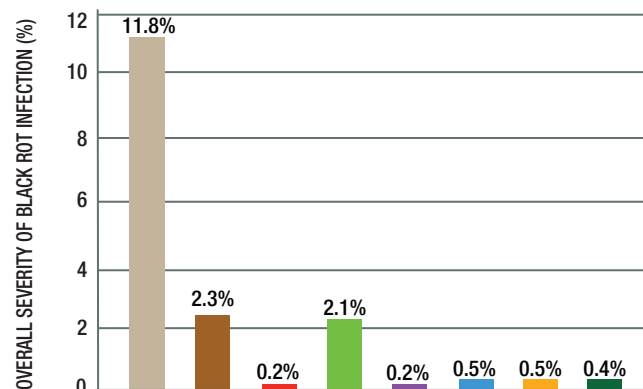
Disease pressure was moderately high for black rot. All treatments (except Agri-Fos) provided excellent control of black rot fruit infection, while black rot leaf spot severity was controlled well by all treatments. Results indicate that PREV-AM ULTRA can be included in an existing fungicide program as a standalone, reduced-risk fungicide spray in order to alternate and reduce the frequency at which other products are used.

■ UNTREATED	
■ Agri-Fos ( <i>K salts of phosphorous acid</i> ) (4 pt./a) _____ Spray# 1 - 7	■ Dithane Rainshield ( <i>mancozeb</i> ) (3 lbs./a) _____ Spray# 1,2,3
■ PREV-AM ULTRA (50 fl. oz./a) _____ Spray# 1 - 7	■ Abound 2.08SC ( <i>azoxystrobin</i> ) (12 fl. oz./a) _____ Spray# 4
■ Phostrol ( <i>Na, K &amp; NH<sub>3</sub> phosphites</i> ) (4 pt./a) _____ Spray# 1 - 7	■ Nova 40WP ( <i>myclobutanil</i> ) (5 oz./a) _____ Spray# 5,6
■ Citrex 100 ( <i>mineral oil</i> ) (2.4 fl. oz./a) _____ Spray# 1 - 7	■ Ziram 76DF ( <i>zinc dimethyldithiocarbamate</i> ) (3 lbs./a) Spray # 5,6,7
■ ProPhyt ( <i>potassium phosphite</i> ) (4 pt./a) _____ Spray# 1 - 7	
■ Sulfur 6L ( <i>sulfur</i> ) (10 pt./a) _____ Spray# 1	
■ Abound 2.08SC ( <i>azoxystrobin</i> ) (12 fl. oz./a) _____ Spray# 4	
■ Elite 45DF ( <i>tebuconazole</i> ) (40 oz./a) _____ Spray# 5	
■ Ziram 76DF ( <i>zinc dimethyldithiocarbamate</i> ) (3 lbs./a) Spray# 5	

### SEVERITY OF BLACK ROT INFECTION ON NIAGARA GRAPE BERRIES



### SEVERITY OF BLACK ROT INFECTION ON NIAGARA GRAPE LEAVES



P.TBL.MILDEW.EU.10.222B