

**Cooperative Research Project, Doug Gubler, U.C. Davis Dept. of Plant Pathology**

Trial name.....	<b>Grape powdery mildew fungicide trial 1 2004</b>	Update: 13 July 2004
Location.....	Courtland, Sacramento Co. (Herzog Ranch)	
Investigators.....	Doug Gubler, 530.752.0304; Ken Dell, 530.752.4982	
Cooperators.....	John Baranek, Tom Herzog	
Crop.....	Grape 'Chardonnay'	
Disease.....	Powdery mildew, <i>Uncinula necator</i>	

**Method**

Objective.....	Efficacy of fungicides for control of powdery mildew		
Experimental design ....	Treatments are field applications to 4 vine plots, in a randomized complete block design, with 4 replications.		
Application method ....	high pressure hand gun sprayer		
Vine spacing .....	7'	Row spacing .....	12'
Treatment unit.....	4 vines	Treatment unit area.....	336 ft <sup>2</sup>
Area/Treatment, sq ft...	1344	Area/Treatment, acre .....	0.0308539
Vol. Water/acre, gal....	113 – 170	Vol. water/trt, gal.....	4-5.25 (6.25-7.5 gal tank)
Apps timing .....	A=budbreak; B = pre-bloom; C=bloom, D=berry set, E=pre-close, F=close, G=veraison		
		Evaluation stage.....	1 week after final app.

Color	Spons	Materials	Oneway Analysis of Severity, % By Color	
			Group	Mean
w	lab	Untreated	A	58.300000
rc	Syngent	Vanguard 75DF	B	0.625000
gs	Dow	Quintec 250SC	B	0.083333
bks	Dow	Quintec 250SC	B	0.083333
bc	Bayer	Flint 50WG Elite 45WP Quintec 250SC	B	0.066667
oc	BASF	Sulfur 80DF Sovran 50WG Rally 40W	B	0.050000
okd	Bayer	Flint 50WG	B	0.041667
bkc	Bayer	Flint 50WG Elite 45WP Pristine 38WG	B	0.025000
bs	Uniroy	Procure 50WS	B	0.016667
b	Dow	Rally 40W Quintec 250SC Pristine 38WG Rally 40W	B	0.008333
yks	Syngent	Quintec 250SC Abound 2.08F	B	0.008333
o	Chemin	Flutriafol 125SC	B	0.008333
bkd	Uniroy	Procure 480SC	B	0.000000
gd	IR4	V-10118 0.41EC	B	0.000000
oks	Gowan	Pristine 38WG Rubigan 1EC	B	0.000000
os	Dow	Rally 40W Quintec 250SC Rally 40W	B	0.000000
p	lab	Pristine 38WG	B	0.000000
pkd	Gowan	Pristine 38WG Rubigan 1EC	B	0.000000
r	Chemin	Flutriafol 125SC	B	0.000000
gkd	Uniroy	Procure 480SC	B	0.000000

rs	BASF	Sulfur 80DF Pristine 38WG	B	0.000000
l	IR4	V-10118 0.41EC	B	0.000000
ykc	BASF	Sulfur 80DF Pristine 38WG	B	0.000000
ykd	Gowan	Pristine 38WG Rubigan 1EC Quintec 250SC	B	0.000000
od	Bayer	Elite 45WP	B	0.000000

Color	Spons	Materials	Oneway Analysis of Incidence, % By Color	
			Group	Mean
w	lab	Untreated	A	100.00000
rc	Syngent	Vanguard 75DF	B	10.00000
oc	BASF	Sulfur 80DF Sovran 50WG Rally 40W	C	4.16667
bc	Bayer	Flint 50WG Elite 45WP Quintec 250SC	C	2.50000
gs	Dow	Quintec 250SC	C	1.66667
bs	Uniroy	Procure 50WS	C	1.66667
b	Dow	Rally 40W Quintec 250SC Pristine 38WG Rally 40W	C	0.83333
yks	Syngent	Quintec 250SC Abound 2.08F	C	0.83333
bks	Dow	Quintec 250SC	C	0.83333
o	Chemin	Flutriafol 125SC	C	0.83333
bkc	Bayer	Flint 50WG Elite 45WP Pristine 38WG	C	0.83333
okd	Bayer	Flint 50WG	C	0.83333
bkd	Uniroy	Procure 480SC	C	0.00000
gd			C	0.00000
oks	Gowan	Pristine 38WG Rubigan 1EC	C	0.00000
os	Dow	Rally 40W Quintec 250SC Rally 40W	C	0.00000
p	lab	Pristine 38WG	C	0.00000
pkd	Gowan	Pristine 38WG Rubigan 1EC	C	0.00000
r	Chemin	Flutriafol 125SC	C	0.00000
gkd	Uniroy	Procure 480SC	C	0.00000
rs	BASF	Sulfur 80DF Pristine 38WG	C	0.00000
l	IR4	V-10118 0.41EC	C	0.00000
ykc	BASF	Sulfur 80DF Pristine 38WG	C	0.00000
ykd	Gowan	Pristine 38WG Rubigan 1EC Quintec 250SC	C	0.00000
od	Bayer	Elite 45WP	C	0.00000

<b>Sponsor</b>	<b>Product</b>	<b>Active Ingr.</b>	<b>Conc.</b>	<b>Tol.</b>	<b>Mfr</b>
BASF	Pristine 38WG	Pyraclostrobin + Boscalid	12.8% 25.2%	Y	BASF
	Sovran 50WG	Kresoxim methyl	50%	Y	BASF
	Rally 40W	Myclobutanil	40%	Y	Dow Agro
Bayer	Flint 50WG	Trifloxystrobin	50%	Y	Bayer
	Elite 45WP	Tebuconazole	45%	Y	Bayer
	Pristine 38WG	Pyraclostrobin + Boscalid	12.8% 25.2%	Y	BASF
	Quintec 250SC	Quinoxifen	250 g/L	Y	Dow Agro
Cheminova	Flutriafol 125SC	Flutriafol	125 g/L	N	Cheminova
Dow Agro	Quintec 250SC	Quinoxifen	250 g/L	Y	Dow Agro
	Rally 40W	Myclobutanil	40%	Y	Dow Agro
Gowan	Rubigan 1EC	Fenarimol	1 lb/gal	Y	Gowan
	Pristine 38WG	Pyraclostrobin + Boscalid	12.8% 25.2%	Y	BASF
	Quintec 250SC	Quinoxifen	250 g/L	Y	Dow Agro
	Latron B-1956	non-ionic surfactant	77%	Y	Gowan
IR-4	V-10118 0.41EC			N	Valent
Syngenta	Vangard 75DF	Cyprodinil	75%	Y	Syngenta
	Quintec 250SC	Quinoxifen	250 g/L	Y	Dow Agro
	Abound 2.08F	Azoxystrobin	300 g/L	Y	Syngenta
Uniroyal	Procure 50WS	Triflumizole	50%	Y	Uniroyal
	Procure 480SC	Triflumizole	480 g/L	Y	Uniroyal
Lab	Sulfur 80DF	Sulfur	80%	Y	Wilbur-Ellis
	Pristine 38WG	Pyraclostrobin + Boscalid	12.8% 25.2%	Y Y	BASF
	Quintec 250SC	Quinoxifen	250 g/L	Y	Dow Agro

