

GRAPE DAMAGE SYMPTOM  
AND CAUSAL AGENT INDEX

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These tables list only the prominent symptoms associated with known causes. Note that many of the symptoms will appear only at certain times of the year and not necessarily at the same time. Some symptoms, such as waterberry whose cause has not been confidently identified, have been omitted. For illustration and more detailed information, refer to U.C. Grape Pest Management Manual (U.C. publication #4105) and Grapevine Nutrition and Fertilization in the San Joaquin Valley (U.C. publication #4087).



II.

SCATTERED VINES  
OR RANDOM VINES

CAUSE	SYMPTOM	defoliated or dried leaves	reduced shoot growth	shoot dieback	yellow leaves	chewed leaves & shoots	red leaves	contrasting veins, veined areas	misshapened leaves arrow-shaped	stunted vines	curled leaves, rolled or folded	scarred or spotted fruit	reduced fruit set	vine dieback	shriveled fruit	brown areas on leaves	small leaves	small berries	delayed fruit maturity	gall development	fall leaf retention	suckering	pits & grooves in wood	wood cankers	dead roots	cream fungal plaques under bark
measles		X					X	X				X			X											
W. Grape Leaf Skeltonizer		X				X																				
Phomopsis Leaf Spot		X <sup>1</sup>		X	X							X		X	X <sup>2</sup>											
Oak Root fungus		X	X				X			X			X											X	X	
Eutypa dieback			X	X	X				X			X	X	X		X										
Corky bark			X	X	X		X		X	X			X					X		X	X	X				
Fanleaf <sup>6</sup>			X					X	X	X		X				X										
Crown gall			X																X							
branch & twig borer				X																						
leafroll					X <sup>4</sup>		X <sup>5</sup>	X		X	X								X							
deer damage						X																				
rabbit damage						X <sup>3</sup>																				

<sup>1</sup>lower leaves in spring

<sup>2</sup>yellow halos

<sup>3</sup>near ground, petioles not eaten

<sup>4</sup>white varieties in fall only

<sup>5</sup>red varieties in fall only

<sup>6</sup>leaves with bands may not have wide basal sinus



IV.  
GENERAL  
PATTERN  
ALL THROUGH

CAUSE	SYMPTOM																													
	reduced shoot growth	reduced fruit set	defoliated or dried leaves	brown areas on leaves	fruit spotted, scarred, or discolored	delayed maturity, immature fruit	yellow leaves	curled, folded, or rolled leaves	veins contrasting with interveined tissue	small berries	misshapened leaves	small leaves	shriveled berries	shoot tip death	red leaves	blistered or bronzed leaves	rotted fruit	flower shedding	water soaked spots	yellow stippled	leaves, white fuzzy areas	fruit, white fuzzy areas	fruit, gray fuzzy areas	cane scars	shoot dieback	vine dieback	webbing on leaves & shoots, dusty	torn leaves, shoot lesions, broken flower clusters	chewed leaves	cupped leaves
mildew	X			X	X			X		X	X <sup>1</sup>					X				X	X		X							
Nit. def.	X						X			X																				
thrips	X				X			X			X				X															X
hail	X																											X		X
air pollution	X		X	X															X											
Phos. def.	X	X							X					X																
Boron def.	X <sup>2</sup>	X							X <sup>3</sup>	X	X			X																
bud mites	X	X						X			X																			
Zn def.	X	X						X	X	X	X																			
moisture stress	X	X	X			X	X						X	X				X								X				
spring frost		X	X			X								X				X							X					
scion/rootstock interaction		X																												
mites			X	X			X																				X			
W. Grape Leaf Skeletonizer			X																											X
leafhopper			X		X														X											
sulfur burn			X	X	X								X	X																
Botrytis bunch rot				X	X											X							X							
high temperatures					X	X							X					X												
leafroll						X	X	X	X						X															
Erineum mites															X															

<sup>1</sup>early spring  
<sup>2</sup>numerous spring laterals  
<sup>3</sup>mid-summer

V.  
PESTICIDES  
CAUSE

SYMPTOM	stunted vines	black or brown areas on leaves	root swelling	leaf margins yellow	veins contrasted with interveined tissue	reduced shoot growth	defoliated or dried leaves	dead tissue at ground level	vine girdled or roots severed below ground	leaf tip burned	yellow leaves	curled leaves	yellow stippled leaves	purple stippled leaves	small leaves	scarred or spotted fruit	cane scars	cane dieback	blighted flower cluster	flower shedding	delayed maturity	misshapened leaves arrow-shaped	cupped leaves	shoot tip death	veins yellow	shriveled berries
	CAUSE																									
<u>RESIDUAL HERBICIDES</u>																										
Napropamide (Devrinol)	X*		X			X*																				
Oryzalin (Surflan)	X*		X			X*																				
Trifluralin (Treflan)	X*		X																							
Dichlobenil (Casoron)				X	X					X																
Diuron (Karmex, Aceto)				X							X													X		
Simazine (Princep)				X	X																					
Dinoseb (Preemerge)		X						X																		
Oxfluorfen (Goal)		X					X																			
<u>FOLIAR HERBICIDES</u>																										
Dinoseb (dinitro)		X						X	X																	
Oxyfluorfen (Goal)		X					X																			
Paraquat (Paraquat CL)		X											X		X		X									
Weed Oil		X							X																	
Glyphosate (Roundup)	X					X									X							X				
Dalapon							X																X	X		
2,4-D (Pennamine, D7, Dacamine)												X	X		X		X	X	X							
<u>INSECTICIDES, FUNGICIDES</u>																										
Zolone													X													
Bayleton																							X			
Sulfur		X					X									X								X		X

\* new vines only