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Grape—Delayed-Dormant/Budbreak Monitoring Form

Supplement to UC IPM Pest Management Guidelines: Grape

For Print Use Only

Grower/Vineyard: _____ Block: _____ Date: _____

Comments: _____

Directions:

1. On a warm day (65°F or above), divide the vineyard into quadrants; monitor 5 vines per quadrant. For the best estimate of pest distribution, monitor fewer vines in more locations. Be sure to include those areas, however, where you have noticed pests in the past.
2. For spur monitoring choose a spur on the basal portion of a cordon closest to the crown.
   - **Cutworms:** Examine 5 buds on each of the 20 vines for damage (hollowed buds). If bud damage is present, look for cutworms under bark, on cordons, trunk, and at soil level. Record the number of damaged buds.
   - ***Pseudococcus* mealybugs:** Look for grape mealybug crawlers under loose bark at the spur tip. Along Central Coast, also look for more mature obscure and longtailed mealybugs at the base of spur, under bark.
   - **Vine mealybugs:** Look for nymphs and females under bark at graft union, in old pruning wounds, and below the base of the spur.
   - **Ants:** If you find ants, search more closely for mealybug crawlers or for European fruit lecanium scale.
   - **Mites:** Look under loose bark at spur tip for orange overwintering form.
   - **European fruit lecanium scale:** If ants are found look more closely for the immature scale under loose bark on old wood.
   - **Thrips:** For wine and raisin grapes, monitor for thrips after budbreak by opening shoots or gently tapping buds over white paper.
3. Note presence or absence (+ or -) of cutworm damage, ants, vine mealybugs, *Pseudococcus* mealybugs, European fruit lecanium scale, and thrips. Count and record mites on each vine.

Location	Vine	Cutworm damage (damaged buds)	Obscure, longtail, & grape mealybugs	Vine mealybug	Ants	Spider Mites	European fruit lecanium scale or thrips (in wine and raisin grapes)
1	1						
	2						
	3						
	4						
	5						
2	6						
	7						
	8						
	9						
	10						
3	11						
	12						
	13						
	14						
	15						
4	16						
	17						
	18						
	19						
	20						
Total							
Percent damaged							
Treatment threshold		Don't treat if less than 4% of the buds per location are damaged.	Treat if 1 out of 5 spurs (20%) is infested according to PMG.	Treat if vine mealybug is found according to PMG.	Identify areas of concern for spring monitoring.	Identify areas of concern for bloom monitoring.	Identify areas of concern for spring monitoring