For Print Use Only

Almonds: Dormant Spur Sampling

Supplement to UC IPM Pest Management Guidelines: Example Form

Directions:

1. To monitor for San Jose scale (SJS), European fruit lecanium (EFL), and mites, clip off 2 to 3 spurs randomly from each of 35 to 50 trees in the orchard, for a total of 100 spurs.
2. Using a hand lens or microscope, examine spurs for scales and mite eggs.
3. On the form below, note presence or absence of each pest on each spur for the first 20 spurs. Add up totals after every 20 spurs (including previous samples) and compare to treatment decision guidelines below. Continue as needed using page 2.

Grower/Orchard_____ **Date**_____

Spur number	Live SJS	Parasitized SJS	EFL	Mite eggs	Scab
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
Total					
Treatment threshold	4 or more	Information only	4 or more	See below	See below

Treatment decisions:

- If either SJS- or EFL- infested spurs are less than 4 but more than 0, examine another 20 spurs and record on chart to the right.
- If 4 or more unparasitized scales of one species are found, treat.
- If no samples with scale are found, stop sampling.
- Collect 40 spurs before making a treatment decision for mites and scab.

Spur number	Live SJS	Parasitized SJS	EFL	Mite eggs	Scab
Totals from prior sample					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
Total					
Treatment threshold	8 or more	Information only	8 or more	8 or more	4 or more

Treatment decisions:

- If grand total of SJS- or EFL-infested spurs is less than 8 but more than 1, look at another 20 spurs and record on the chart to the right.
- If 8 or higher, stop sampling and treat.
- If 1, stop sampling.
- Treat for mites if 20% or more spurs are infested.
- Treat for scab if 10% or more spurs are infested.

Spur number	Live SJS	Parasitized SJS	EFL	Mite eggs	Scab
Totals from prior sample					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
Total					
Treatment threshold	12 or more	Information only	12 or more	12 or more	6 or more

Treatment decisions:

- If grand total of SJS- or EFL-infested spurs is less than 12 but more than 3, look at another 20 spurs and record on the chart on page 2.
- If 12 or higher, stop sampling and treat.
- If 3 or less, stop sampling.
- Treat for mites if 20% or more spurs are infested.
- Treat for scab if 10% or more spurs are infested.

Almonds: Dormant Spur Sampling *(continued)*

Spur number	Live SJS	Parasitized SJS	EFL	Mite eggs	Scab
Totals from prior sample					
61					
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
Total					
Treatment threshold	16 or more	Information only	16 or more	16 or more	8 or more

Treatment decisions:

- If grand total of either SJS- or EFL-infested spurs is less than 9 but more than 5, look at another 20 spurs and record on chart to the right.
- If 16 or higher, stop sampling and treat.
- If 5 or less, stop sampling.
- Treat for mites if 20% or more spurs are infested.
- Treat for scab if 10% or more spurs are infested.

Spur number	Live SJS	Parasitized SJS	EFL	Mite eggs	Scab
Totals from prior sample					
81					
82					
83					
84					
85					
86					
87					
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					
Total					
Treatment threshold	20 or more	Information only	20 or more	10 or more	

Treatment decisions:

- If grand total of either SJS- or EFL-infested spurs is 20 or more, treat.
- If less than 20, no treatment is recommended.
- Treat for mites if 20% or more spurs are infested.
- Treat for scab if 10% or more spurs are infested.