# UC CE VINE NEWS

**UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION**

**RIVERSDE COUNTY**

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INDIO, CA 92201

Newsletter Spring 2018

## RECENT NEWS

1. Temecula Valley Vine Mealybug Update.
2. Powdery Mildew
3. Vineyard Balance

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## TEMECULA VALLEY VINE MEALYBUG UPDATE

Mealybugs are soft, oval, wax-covered insects that feed on many plants in garden, landscape, and indoor settings. Usually found in colonies, they are piercing-sucking insects closely related to soft scales but lack the scale covers. Like soft scales, they can produce abundant honeydew and are often associated with black sooty mold. Mealybugs are favored by warm weather and thrive in areas without cold winters or on indoor plants.

In February of 2017 vineyard managers, vineyard owners and University of California researchers joined efforts to develop and implement a pilot program to survey and control infested vineyards with mealybugs. Mealy bugs have continued to make a presence in the Temecula wine region and have been present in most vineyards in the valley

This newsletter provides data and information on traps placed around the valley as well as mealybug counts performed by the University of California Cooperative Extension (UCCE) in 2017.

*"IMPORTANT TIME TO MONITOR FOR MEALY BUGS AND POWDERY MILDEW"*

## MEALYBUGS

It is an important time to keep an eye on signs of mealy bugs. Weather conditions are prime and important to monitor your vineyard. Here are two very good papers on Powdery Mildew:

### UC PEST MANAGEMENT GUIDELINES – Mealybugs

1. http://ipm.ucanr.edu/PMG/PESTNOTES/pn74174.html

## POWDERY MILDEW

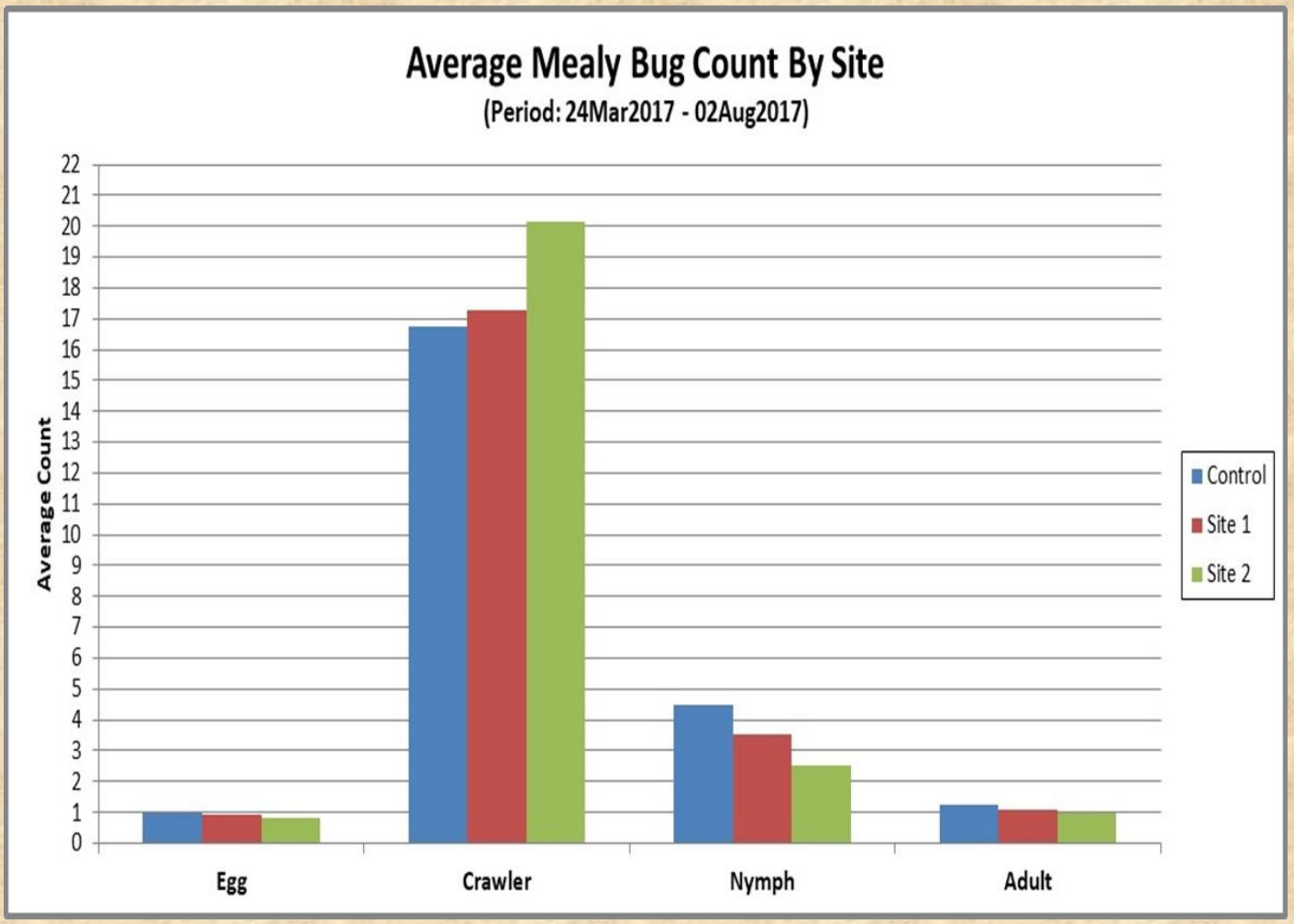
It is an important time to keep an eye on signs of powdery mildew. Weather conditions are prime and important to monitor your vineyard. Here are two very good papers on Powdery Mildew:

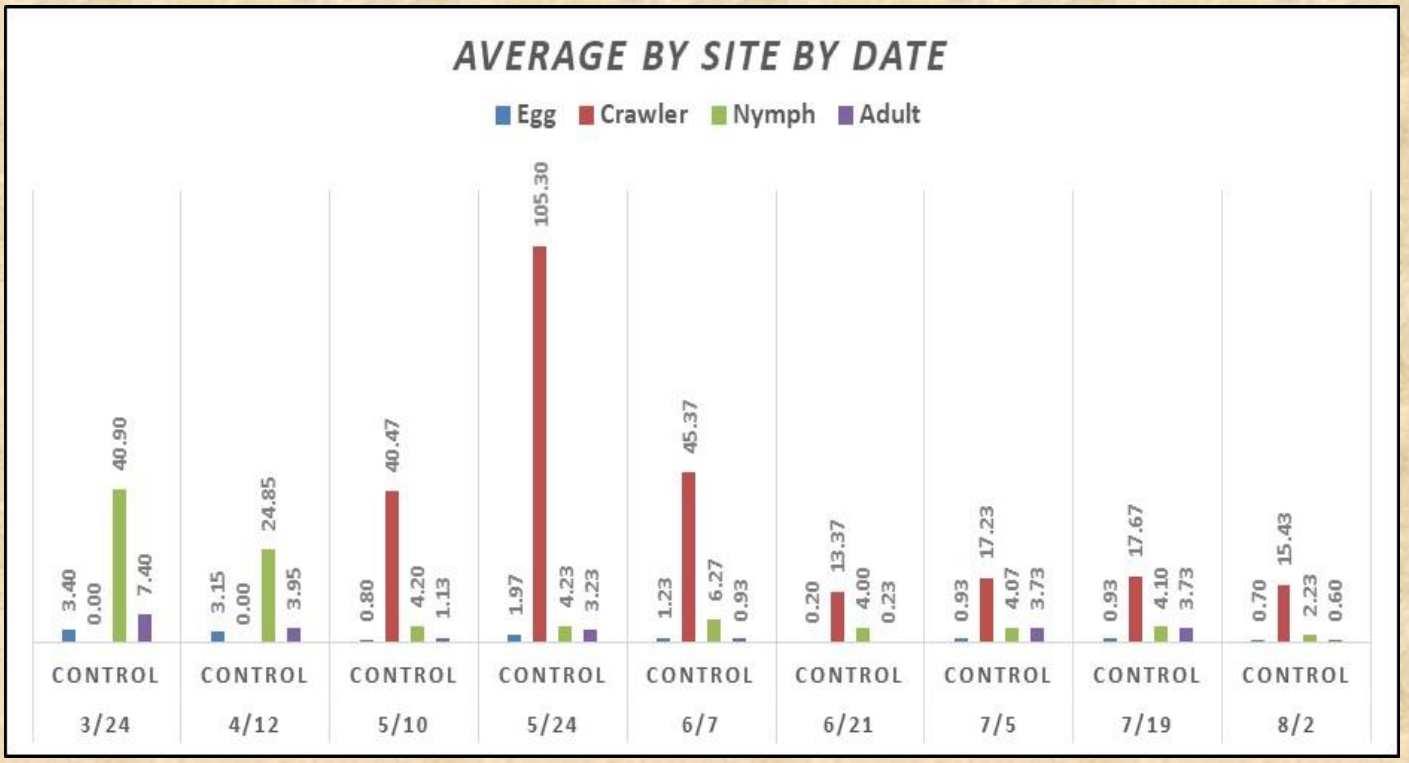
### CONTROL OF POWDERY MILDEW USING THE UC DAVIS POWDERY MILDEW RISK INDEX

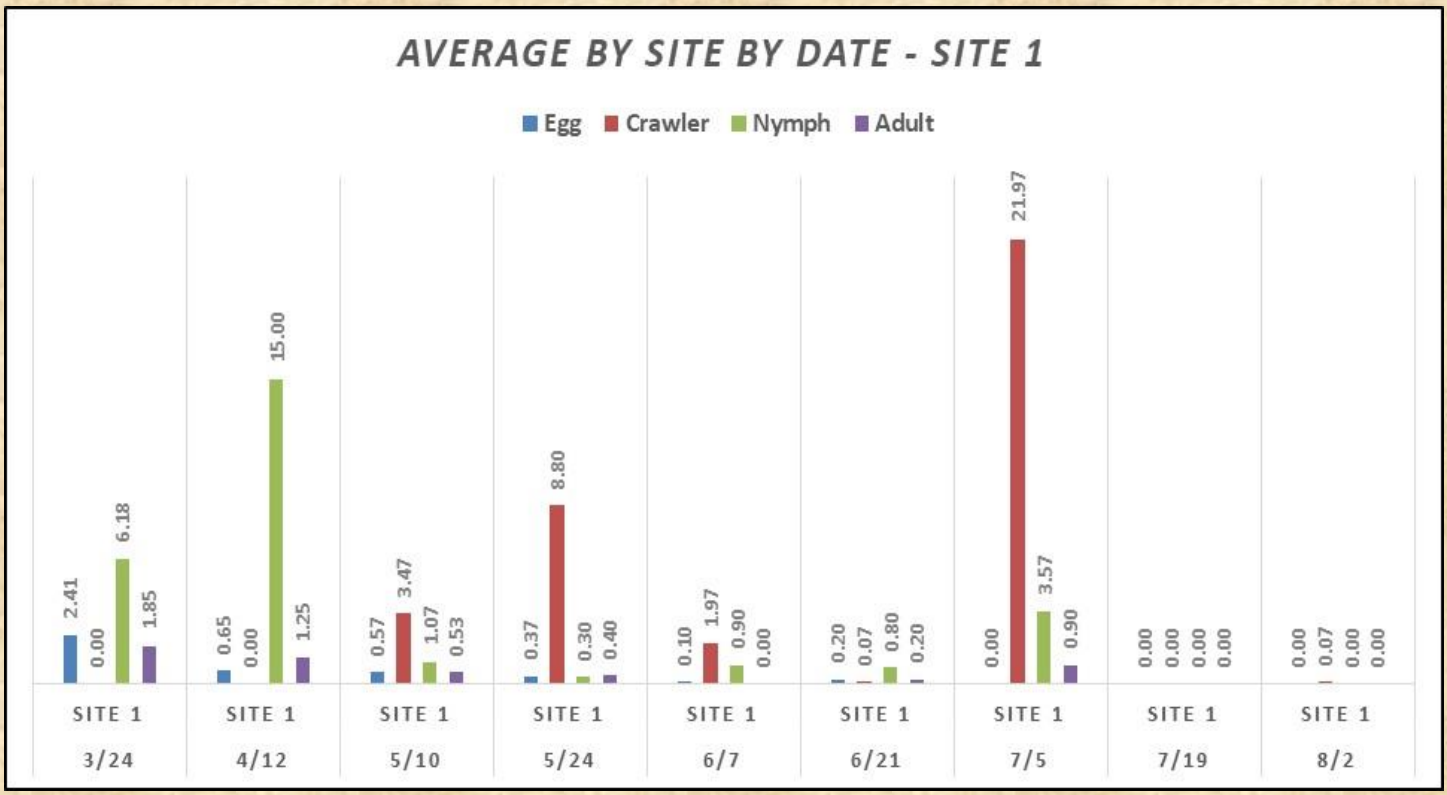
1. http://www.apsnet.org/publications/apsnetfeatures/Pages/UCDavisRisk.aspx

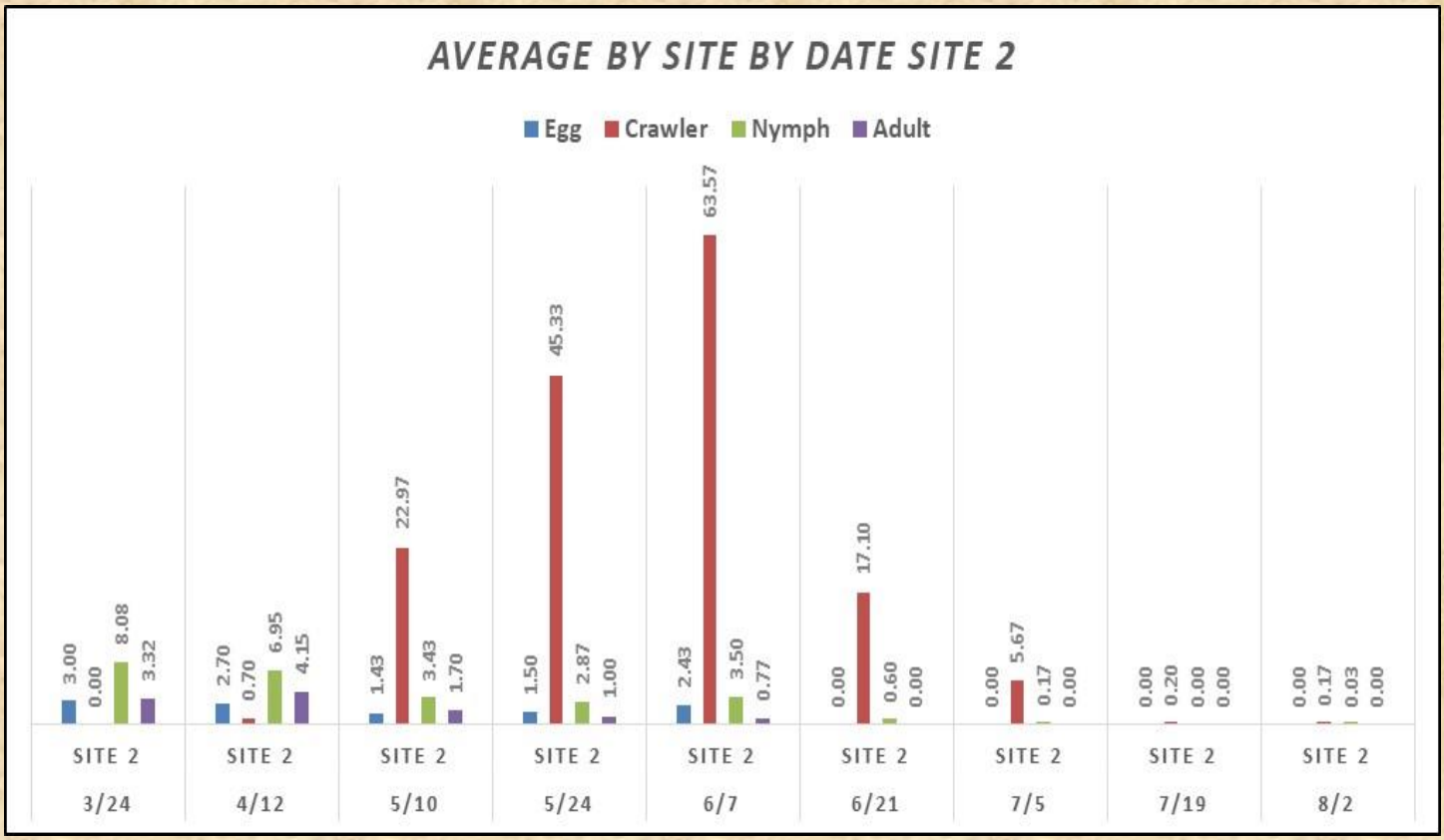
### UC PEST MANAGEMENT GUIDELINES – Grape Powdery Mildew

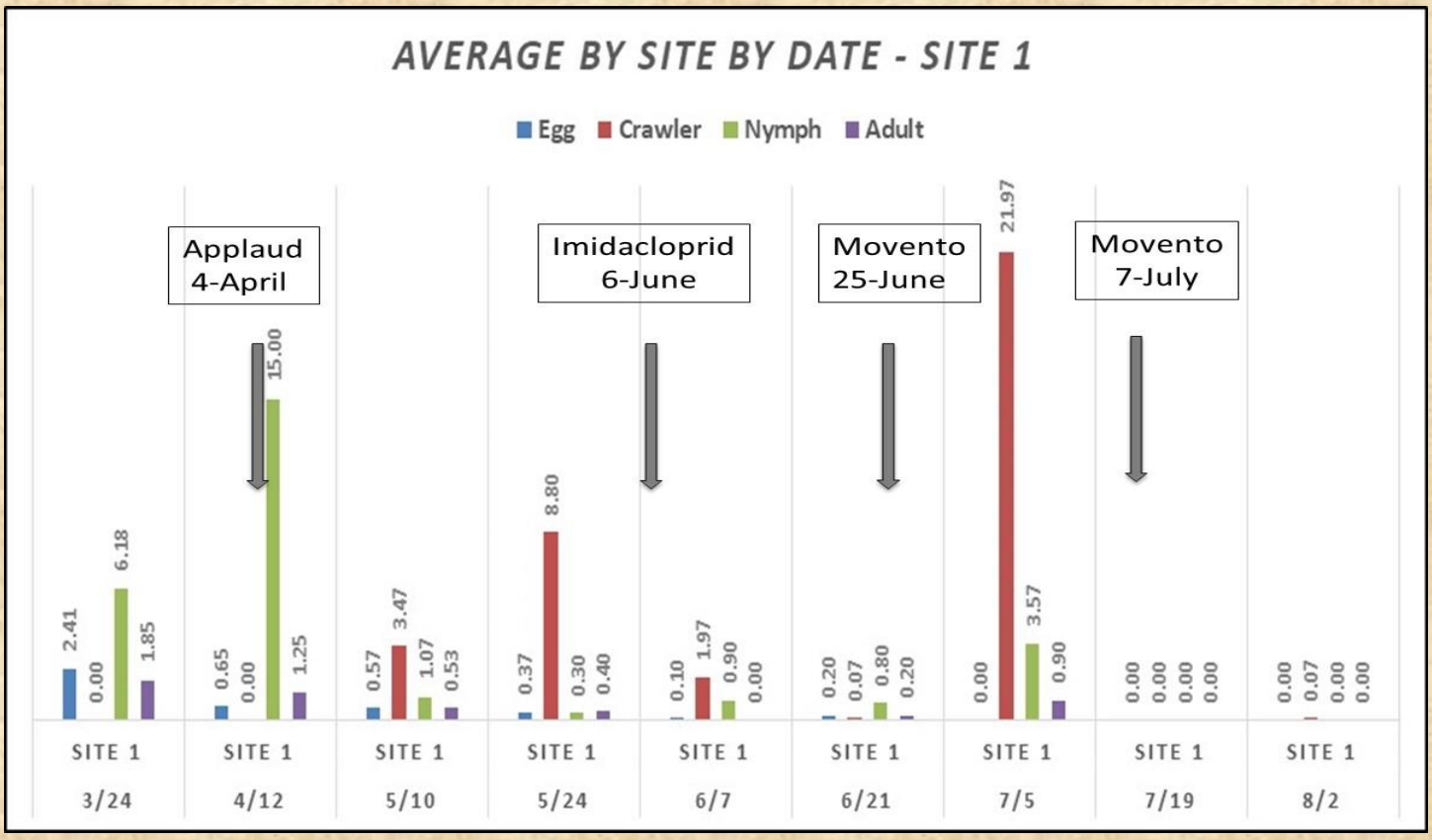
2. http://ipm.ucanr.edu/PMG/r302100311.html

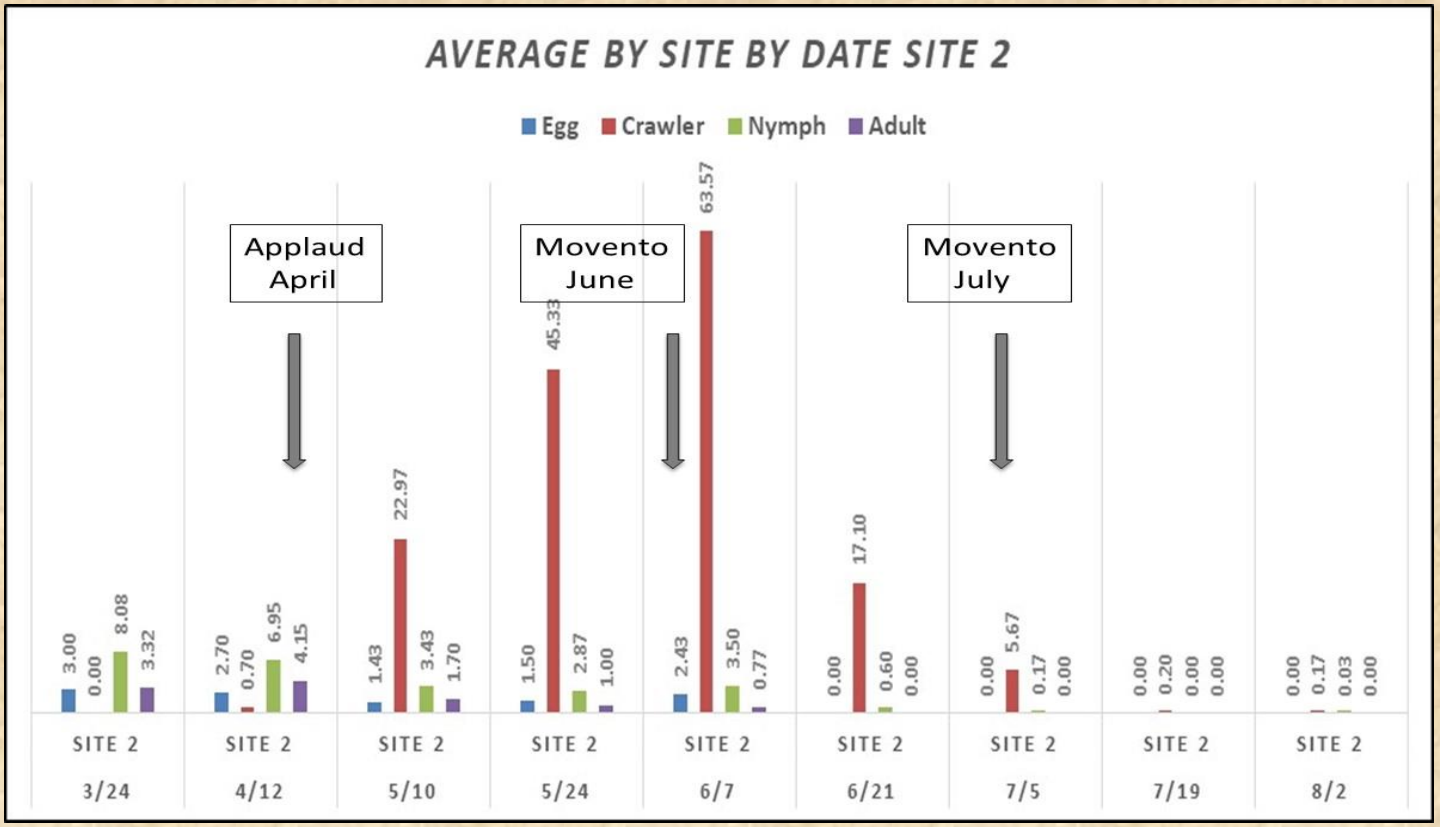

Average Mealy Bug Count By Site
(Period: 24Mar2017 - 02Aug2017)
Average Count
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
Egg
Crawler
Nymph
Adult
Control
Site 1
Site 2


AVERAGE BY SITE BY DATE
Egg
Crawler
Nymph
Adult
3.40
0.00
40.90
7.40
3.15
0.00
24.85
3.95
0.80
40.47
4.20
1.13
1.97
105.30
4.23
3.23
1.23
45.37
6.27
0.93
0.20
13.37
4.00
0.23
0.93
17.23
4.07
3.73
0.93
17.67
4.10
3.73
0.70
15.43
2.23
0.60
CONTROL
3/24
CONTROL
4/12
CONTROL
5/10
CONTROL
5/24
CONTROL
6/7
CONTROL
6/21
CONTROL
7/5
CONTROL
7/19
CONTROL
8/2


AVERAGE BY SITE BY DATE - SITE 1
Egg
Crawler
Nymph
Adult
2.41
0.00
6.18
1.85
0.65
0.00
15.00
1.25
0.57
3.47
1.07
0.53
0.37
8.80
0.30
0.40
0.10
1.97
0.90
0.00
0.20
0.07
0.80
0.20
0.00
21.97
3.57
0.90
0.00
0.00
0.00
0.00
0.00
0.07
0.00
0.00
SITE 1
3/24
SITE 1
4/12
SITE 1
5/10
SITE 1
5/24
SITE 1
6/7
SITE 1
6/21
SITE 1
7/5
SITE 1
7/19
SITE 1
8/2


AVERAGE BY SITE BY DATE SITE 2
Egg
Crawler
Nymph
Adult
3.00
0.00
8.08
3.32
2.70
0.70
6.95
4.15
1.43
22.97
3.43
1.70
1.50
45.33
2.87
1.00
2.43
63.57
3.50
0.77
0.00
17.10
0.60
0.00
0.00
5.67
0.17
0.00
0.00
0.20
0.00
0.00
0.00
0.17
0.03
0.00
SITE 2
3/24
SITE 2
4/12
SITE 2
5/10
SITE 2
5/24
SITE 2
6/7
SITE 2
6/21
SITE 2
7/5
SITE 2
7/19
SITE 2
8/2


AVERAGE BY SITE BY DATE - SITE 1
Egg
Crawler
Nymph
Adult
Applaud 4-April
Imidacloprid 6-June
Movento 25-June
Movento 7-July
2.41
0.00
6.18
1.85
0.65
0.00
15.00
1.25
0.57
3.47
1.07
0.53
0.37
8.80
0.30
0.40
0.10
1.97
0.90
0.00
0.20
0.07
0.80
0.20
0.00
21.97
3.57
0.90
0.00
0.00
0.00
0.00
0.00
0.07
0.00
0.00
SITE 1
3/24
SITE 1
4/12
SITE 1
5/10
SITE 1
5/24
SITE 1
6/7
SITE 1
6/21
SITE 1
7/5
SITE 1
7/19
SITE 1
8/2


AVERAGE BY SITE BY DATE SITE 2
Egg
Crawler
Nymph
Adult
Applaud April
Movento June
Movento July
3.00
0.00
8.08
3.32
2.70
0.70
6.95
4.15
1.43
22.97
3.43
1.70
1.50
45.33
2.87
1.00
2.43
63.57
3.50
0.77
0.00
17.10
0.60
0.00
0.00
5.67
0.17
0.00
0.00
0.20
0.00
0.00
0.00
0.17
0.03
0.00
SITE 2
3/24
SITE 2
4/12
SITE 2
5/10
SITE 2
5/24
SITE 2
6/7
SITE 2
6/21
SITE 2
7/5
SITE 2
7/19
SITE 2
8/2

## VINEYARD BALANCE

There is always a lot of interest in maximizing yield through proper cultural practices, disease and pest management, vine nutrition, irrigation, etc. In recent years, improved fruit quality along with more highly valued appellation and vineyard-designated wines have become important to local growers.

The most important aspect about managing vine growth, whether using an exotic trellising system, a "new" rootstock, or less water and nitrogen, is that a balance is achieved between the vegetative growth and fruit development. A given vineyard in a particular site has a certain capacity to produce a fruit crop and also has a potential capacity of vegetative growth for vine size and leaf area. Questions that seem to come up from time to time are: "How many buds should I leave on these vines?" or "What is a good crop level?"

These are good questions that are site specific and depend on grower and winery goals.

A suggested procedure for measuring pruning ratio can be found at the following site by Paul Verdegaal, San Joaquin County Farm Advisor:

http://www.vineyardteam.org/files/resources/2016%20Tailgate%20Files/Pruning%20for%20Vine%20Balance-%20Verdegaal.pdf