

Mite Check Techniques

Equipment:

- 1) White basin
- 2) Wide mouth quart mason jar with #8 metal screening
- 3) 1/2 cup measuring cup
- 4) Tablespoon measure
- 5) powdered confectioners sugar
- 6) spray bottle with water
- 7) paper plate
- 8) paper & pencil (or sharpie)

Taking a sample:

1) take a brood frame full of bees (check for queen!) and shake into a box or bucket

2) use 1/2 cup measure to scoop up bees (~300) **For Powdered Sugar shake:**

1) Pour into a mason jar that has a mesh cap (#8 screening)

2) Add 2 tablespoons of sugar

3) shake about 30 seconds

4) let sit 1 minute

5) shake out sugar/mites onto white paper plate or other surface

6) repeat until no more mites fall

7) spray with water to dissolve sugar to count mites

Ether roll:

1) pour bees in a glass jar

2) 2 quick bursts of ether (Starting fluid spray can)

3) replace cap & shake vigorously for 30 seconds

4) rotate jar

5) count mites; be sure to check cap

Alcohol wash (or windshield washer fluid):

1) Add 2 oz to glass jar with bees

2) cover and shake vigorously

3) filter with screen, coffee filters

What the numbers mean: Take the number of mites collected, [divide by 3, times 2 = % mite infestation] OR

[#mites/3 X 2 = % mite infestation]* < 10% no treatment, 10-12% watch, 12% treat

* [Mite count chart \(PDF\)](#)

Brood Examination (Drone):

Uncap ~100 cells in purple eye stage

Assess general mite load

Sticky Boards

for 3 days; divide by 3 for a 1 day average

Treatment threshold, please read resources for more detailed information:

12 mites in Spring

23 mites in Fall

*From slide 21, Diana Sammataro's "Diagnosing Varroa"; Lee et al. 2010. Practical sampling plans for Varroa destructor in Apis mellifera colonies and apiaries J Econ. Ento. 103(4).