



Nosema Sampling Vacuum for Sample Collection

Nosema is prevalent in foraging bees. Samples can be collected without opening the colony.

Sampling with a Vacuum: You will need:

- 9.6 volt Black and Decker Dust Buster.
- One 1/4" drain pipe to 1/2" CI plastic reducer.
- One 1/4" drain pipe approximately 7 1/2" long.
- Wire mesh or screen.
- One 1/4" x 1/4" hard plastic reducer.
- 3/4" plastic nozzle.
- Hot glue gun.



Step 1: Remove dust bowl and filters from your vacuum. Glue 1/2" soft plastic reducer piece around suction base on vacuum (not all dust busters can accommodate this so check before you buy).

Step 2: Cut wire mesh to fit inside one end of the 1/4" drain pipe and glue to piping. This piping will fit into the 1/2" soft plastic reducer. Make sure the wire mesh end goes into the reducer so the bees are not sucked into the internal vacuum.

Step 3: Glue the 1/4" x 1/4" hard plastic reducer and 3/4" nozzle together. These pieces will slide on and off the other end of the 1/4" drain pipe.

Sampling with a Paint Brush: Close colony entrance with an entrance reducer. Using a small paint brush sweep the foraging bees returning to the hive into a wide mouth jar with alcohol.

Sample Size and Storage: If sampling individual colonies, collect approximately 30 bees per colony. For a composite (yard) sample, collect 10 bees per colony (10 colonies per yard). Sample jars should contain 70% isopropyl alcohol (available from drug stores, dilute to 70%). Soak bees for at least 2 hours, drain the alcohol and place sample in ziploc bags (double bag). Clearly identify each sample (bag). Send samples in a well packaged box (do not crush).

Nosema samples should be collected prior to a treatment opportunity, early in the spring when you check your bees or late summer, early fall.

Ontario Honey Bee Diagnostic Laboratories:

Jim Anderson, Tanglewood Honey Bee Lab Services

RR 1, 35548 Highway 41, Eganville, ON K0J 1T0 (613) 628-2890
(Make cheque payable to Jim Anderson)

Note: Contact Jim before sending samples. It is also critical to tell the lab which test(s) you would like conducted on your sample(s).