

## **DROP OR STICKY BOARD METHODS & EQUIPMENT**

### **General Recommendations:**

- Commercially made pre-glued boards and screens are available. Do not cut these in half.
- Minimum board size for a standard Langstroth hive is 12" X 16" (30 X 40cm) and must be put in the middle of the bottom board.
- The board must be covered by 1/8" (3mm) wire screen raised 3/8" (1cm) above the board. If the screen is touching the board, the bees have access to the board and will remove mites along with debris and your drop count will be inaccurate. Re-usable homemade boards are commonly used. However, be careful! Do not use core-flue or other plastics that can carry debris from one hive to another. You must clean the board and screen before moving the board to another hive to prevent the spread of disease. Metal screens can be cleaned and sterilized in boiling water or sterile solutions.

### **Reusable Testing Equipment:**

- Sticky boards (.040 (1mm) Styrene plastic sheet 12"x16" (30 X 40cm))
- 50/50 petroleum jelly and cooking oil mix. Stir this mix with a drill or a hand mixer.
- Foam brush to fit into the petroleum jelly jar.
- Screen: 1/8 (3mm) mesh raised 3/8" (1cm) by two mid wedges and by bending the edges of the mesh.
- Stucco wire mesh 14"x20" with 2" squares as a counting guide.
- Butcher paper
- Counting clicker and watchmaker glasses for easy counting.
- The average handyman can make 24 test boards and screens for less than \$50. Then, just buy a counter for \$2 and glasses for \$15.

## Method – Instructions and Calculations:

1. Cover one side of the sticky board with the mixed petroleum jelly in an even layer (the drier the climate the thicker the layer). Insert the sticky board under the hive by placing it on the bottom board and cover it with a screen. Record the date and hour in the chart.
2. After three days (when it is convenient – up to five days) remove the sticky board and count the mites. Record the number onto the test chart. If the weather or circumstances require, you can take the boards home and count them in comfort: cover the boards with the waxed side of the butcher paper, write the number of the hive on it. Take these to a convenient place for counting. Record the date and hour the sticky board was removed on the test chart.
3. At the counting place, remove the wax paper from the sticky board. Check to see if any mites stuck to the wax paper. Count these. Place the “stucco wire counting guide” over the board and count the mites in all squares (a counting clicker helps), divide the total by the number of hours the boards were in the hives. Multiply this number by 24 and you have the prorated (average) natural drop for a 24-hour period. Write these numbers into the chart.

**NOTE:** For pesticide or acid drop, do the same but only for a 24 to 48-hour period, prorated to 24 hours.