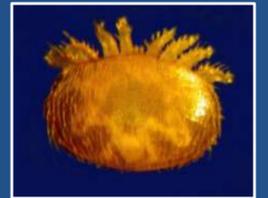


Varroa Mite Research with Russian Honey Bees



Using comparisons of Russian and Italian Honey Bees, find a Selection Tool to Breed Italian Honey Bees for Resistance to *Varroa*

Evaluate ALL the Mites on Bottom Board Traps in Order to:



1. Estimate the numbers of infesting mites without sampling brood and bees for mite population growth to evaluate mite population growth
2. Find a measurement that is related to resistance and can be evaluated from a single trap

Classes of Mites on Bottom Boards related to Total Colony Mites

1. Mite Population Growth:

Two measurements of numbers of younger mites as estimates of total mites ($r^2 = 0.62$)

2. Reduced Numbers of Mites to Evaluate Resistance

The ratios of older mites/ all mites (O/T) ($r^2 = -0.34$) and older mites/ younger mites (O/Y) ($r^2 = -0.26$) show promise

