

The Lebanese honey bee race

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There are many races of bees in the world, of which four only collect honey. Three of those four came from Asia: Apis Florea, Indica and Dorsata.

Apis mellifera came out of Africa and spread in the entire world where it acclimated. Then, the race which settled in Caucase became different of its two sisters which settled in Italy and Yugoslavia. This is how the Italian race, which is the most widespread and the Caucasian and Carniolan races appeared.

In his book "The Hive and The Honey Bee", Dadant stated that according to Blum, the Italian race took the place of the Syrian; but this is partially wrong since the Syrian race was replaced by the Italian in Palestine only while in Great Syria, the Syrian race still reigns in Jordan, Saudi Arabia, Syria, Lebanon and Iraq .

Qualities of the Lebanese race

The Lebanese bee is of medium size and weight, thus smaller and more svelte than the Italian bee.

In my opinion, it has the ideal size and weight to be strong and fast enough to carry more honey in less time. The frontal abdominal segments are light brown while the lower ones are dark nearly black. The thorax is covered with light gray hair which is more dense and tending to white on the drones. Lebanese drones are stronger and more vivid and this is why they catch the queen before any foreign drone in the nuptial flight. This fact lead to the dissolution of all the races we imported to Lebanon within two years.

Some villagers think that there are two strains of Lebanese race: one builds the combs in longitude, according to the direction of the entrance and the other in latitude, opposite to this direction. Personally, I don't believe there are two strains but the same bees build their combs in accordance with the entrance or opposite to it, depending on the weather when hived and their need for fresh air.

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Standard solutions, doped and blank honey were used to calculate recovery rates.

Results and Discussion

Recovery rates were 78.10% for Dibromobenzophenone, 81.77% for Bromopropylate, 83.65% for Coumaphos and 92.84% for Fluvalinate.

Detection limits were 0.5ppb for Bromopropylate, 1ppb for Coumaphos and 0.74ppb for Fluvalinate.

Results showed that 9 samples contained pesticide residues, these samples have different origins.

From the 9 samples, 2 contained residues of Dibromobenzophenone, 1 had residues of Bromopropylate, 1 of coumaphos and 6 of Fluvalinate.

The residues of pesticides are far from having toxicological value but with the onset of varroa resistance to fluvalinate and the high affinity of the compound to beeswax, we tend to believe that residue levels are to increase with years if an alternative treatment is not introduced.

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