SPEAKING OF HONEY BEE GENETICS

A selection that narrows excessively the genetic variability is a blind road and leads to excessive biological specialization, which results in an inability to adapt to the environmental and parasitological conditions that vary over time, as well as a weakening of the species' vigor.

The mating ritual of bees, which takes place during their flight, and in which queens and drones converge, indicates that a frequent genetic replacement is biologically beneficial for honey bees.

This is one of the reasons why we prefer to breed Virgin Queens. We know very well that what causes, in the first place, a decrease in the genetic features we have chosen. However, we are convinced that a winning strategy consists of the genetic variety.

Among the queens that we have purchased, followed by the selection method we offer, in association with the queens themselves, you will be able to identify the subjects with the best biological and behavioral characteristics for your productions and the health of your apiary.

Homozygous genotypes can only be achieved after several generational steps in which males and females bringing the same genetic characteristics are coupled. This, on one hand, leads to a high transmissibility of the same genetic characteristics on the offspring, and, on the other hand, results in a weakening of the vigor of the same selection.

Thus, homozygous genotypes can only be bred and pushed to a certain point, beyond which the negative effects on the offspring become higher than the advantages gained.

Otherwise, an expert selection of different genetic strains of honey bees, also obtained from strains already selected and then crossed with ecotypes of different origins (what you can do starting with a strain of selected bees, which is then crossed with your bees) leads, if performed in the right way, to preserve and reproduce genetic and behavioral characteristics useful for production of the hive and for the health of the bees, while maintaining the genetic variability of the species.

The breeder queens we use are heterozygotes. From these you can identify any descendants who have inherited the genetic characteristics of the mother. The final result on the families that will be produced is also influenced by the quality and the genetics of the drones that will mate with such descendants.

Queens which are purchased, mated in your apiary, and possibly identified as being resistant to your selection work, may be used by you as breeders.

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