



# B-PLUS

BEEKEEPING REPORT FROM MICHIGAN STATE UNIVERSITY

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## **AFRICANIZED HONEY BEES**

Some of you are probably aware that the U.S.D.A.'s Agricultural Research Service and the Animal and Plant Health Inspection Service (APHIS) would like to establish a bee regulated zone (BRZ) at the Isthmus of Tehuantepec in Mexico. The BRZ is intended to stop the Africanized Honey Bee (AHB). The cost of the BRZ varies with just exactly would be done and to what extent. The range is from about \$2.2 to \$17 million. Most people I have talked to believe that the AHB will have passed the BRZ before the money could be appropriated or before anyone would be there to implement the program. It would seem that APHIS is trying to save face, so they can at some later date tell a concerned congress that they "tried" to control the AFB.

At the recent International Conference on Africanized Bees and Bee Mites at Ohio State University, Dr. David Fletcher suggested (possibly somewhat tongue-in-cheek) that we needed to import MORE African bees! His thesis was that there were bees in Africa that were a lot more gentle than the ones found in South and Central America. By importing these gentle AHB, to be released at the front of the advancing bees, we could change the temperament of the bees moving north in Mexico.

I am sure this will not happen for a number of reasons. However in talking to several scientists at the conference I am convinced that there are some AHB in South and Central America that are more gentle than others, and thus we may have the genetic material to modify the bees once they come under heavy beekeeping pressure here in the U.S. This modification will take some time, and it is too bad that we are not working to that end now by sending scientists to South America to do some selection. I feel that with even one million dollars we could do a great deal more than by trying to put up a barrier in Mexico at a cost of 10 or 20 times as much.

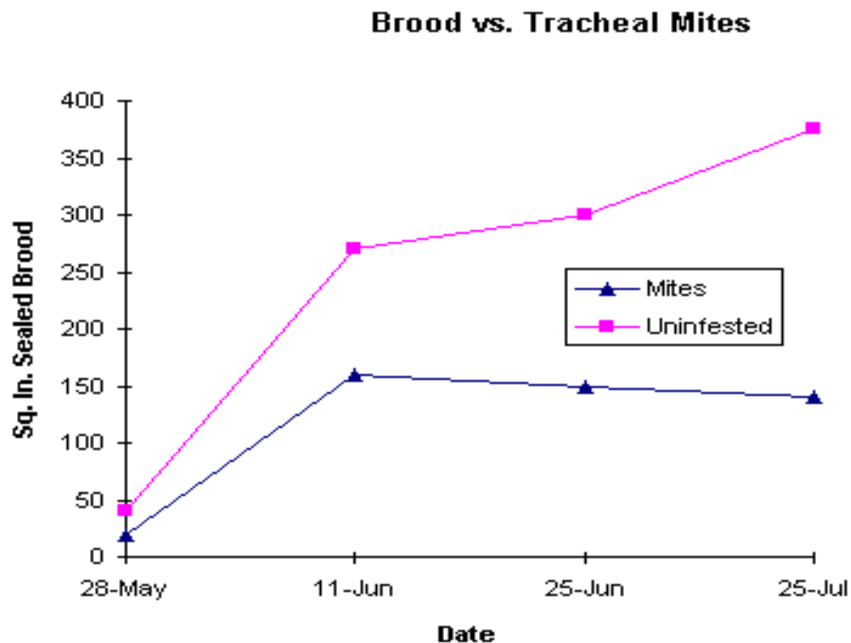
Dr. Orley Taylor, of the University of Kansas, predicts that the AHB will be in Texas in late 1988 or early 1989, even with the BRZ. That is not much time! I suspect beekeepers here will again experience the problem that some had when the killer bee movies came out, and that is, that some landowners will request that you move your apiaries from their property.

## TRACHEAL MITES (Canada Project)

This is in the nature of a summary from the talk that Dr. Donald Peer gave at the ANR Week Beekeeping program. For some of you this may be somewhat old, but I hope there is a little added.

The Canadian beekeepers began the project to assess the effect that tracheal mites could have on package bees imported from the U.S. They set up two apiaries of bees in La Ronge, Saskatchewan. One was infested with mites and the other one was kept as the control. The first year's results were dramatic for the packages, but not so great for the overwintered colonies. The two apiaries had some differences as far as nosema as well as mites, so the results may have been confounded. Essentially the packages, with mites, were in no condition to winter over.

You can see in the graph (Below) the infested package colonies were never able to raise the necessary brood. Interestingly enough, when I compared the level of mite infestation to the amount of brood, the brood declined with increasing amounts of mites though only very little. That is the regression was just slightly negative. So a colony could have had a heavy infestation yet the reduction in brood would only be slight compared to a lightly infested colony. So why the great difference in the amount of brood between the infested and uninfested colonies? I don't know. It may be that even a low level of mites greatly reduces brood rearing in packages of bees, or the stock was different, or nosema, or a combination of things, or ??



## FALL FEEDING

Here we are in the middle of summer with nectar coming in? and I want to talk about fall feeding. It is never too early to plan on future operations as then the job is done on time.

Some years ago I heard a talk by the late Norm Sharpe of New York state. He was a very successful beekeeper with about 1200 colonies that he used for pollination and honey production. He said that before he changed to extensive fall feeding he had far too much winter loss and thus was not ready for the pollination season. His method was to take as much honey off as he could in the fall and then fed back sugar syrup -at least 60 pounds! He also did one other thing that was different and that was he wintered in one deep plus a shallow, but the shallow was on the bottom. I suspect this allowed the bees to more or less completely fill the deep super and then allowed the bees to cluster in the shallow during the fall and early winter.

By removing as much honey as possible and then feeding syrup you let the bees fill up the food chamber with honey as they need to in order to survive the winter. There will not be any more moving combs or taking honey out, etc. Additionally, the syrup probably makes better wintering honey because it contains little pollen or ash that can cause the bees to have excessive waste during the long winter. Often the fall honey of aster or goldenrod is not the best wintering honey. Thus the bees winter on the best type of honey that is located where the bees can reach it during the months when they are clustered to conserve heat.

There are some added benefits to fall feeding, as well. It is an excellent time to treat the colony for nosema disease. Just add the antibiotic fumagillin (Fumidil-B or Nosema-X) to the syrup to reduce the level of the disease during the winter cluster. If you can reduce the level of nosema to a very low state in the fall then the amount of buildup during the cluster period will be less. It seems like a lot of money when you buy a bottle of the antibiotic, yet the increase in production will almost always justify the cost.

What kind of syrup should you feed. That will depend upon the price of the sugar or isomerase that you can buy. Generally the isomerase syrup has been much lower price than cane or beet sugar. There is no evidence that would indicate that one or the other is superior. As far as concentration is concerned, use as heavy a syrup as is convenient. Remember you are trying to produce as much honey as possible in a short time. We found that feeding 2:1 syrup would give us almost exactly the same amount of honey as sugar added, since the bees have some water in honey too.

There is one concern about fall feeding. You must start early enough to let the bees remove it from the feeder and make it into honey. This takes some time if the weather is cool, and it often is in the fall. I usually suggest to start feeding as early as the middle of September unless you are in the middle of the fall honey flow. It can turn cold early in October.

## MICHIGAN BEEKEEPER'S ASSOC.

The Michigan Beekeeper's Association is the oldest, continuously operating, agriculture association in Michigan. It is considered the voice of Michigan beekeeping by the legislature and by the Michigan Department of Agriculture. It deserves your support so that it can carry out YOUR wishes. By supporting the MBA you make the voice of beekeeping that much more meaningful. It does not matter if you are a hobbyist or a professional beekeeper your ideas and your enthusiasm for bees are important. You can become a member directly, or in many cases through a local or regional association. The dues are \$20/year. The treasurer is David Barber, P.O. Box 139, Davisburg, MI 48350.