FOR GENTLING BEES

A new, better and practical method for driving honey bees from honey supers has been devised by scientists at the U.S. Department of Agriculture Bee Culture Laboratory on the University of Arizona campus.

According to Dr. Alan W. Woodrow and Frank E. Todd, whose experimentation has developed the new device, the fumigating agent is propionic anhydride, replacing the traditional carbolic acid fumigant.

The Bee Culture people have designed a rectangular form to fit over the super, after the top is removed. The form is made of quarter inch plywood. Inside is a pad made of three or four layers of muslin cloth, and below that is fitted a sheet of masonite dotted with holes. On the outside of the plywood covering is attached a bellows.

In practice, the pad is charged by sprinkling it with a mixture of one tablespoonful of propionic anhydride mixed with an equal amount of water. Then the cover of the colony (hive) is removed and the charged unit placed on top of the hive.

The bellows is worked five or six times, then half a minute later is worked a dozen times more, driving the repellent into the hive, to quiet the bees so that honey can be removed.

Dr. Woodrow says the ease with which bees are removed or repelled can depend on several factors, including temperature and colony conditions. High temperatures, causing more rapid vaporization of the repellant, tend to bring on stupefaction. It is more difficult to drive the bees when the honey is unsealed and when there is brood, he has observed.

The federal bee people who have perfected this device say the treatment seems to have no harmful effect on bees or brood. Except that the bees are very quiet and not inclined to sting, no abnormal behavior is observed. And within minutes after the repellent device is removed and the top replaced on the hive, bees will reoccupy combs from which they have been driven.

Generally, honey can be removed without use of smoker or veils.

In this first picture, Dr. Woodrow applies the propionic anhydride-water mixture to the pad. In the center picture the device is fitted to the hive and the bellows are operated.

The bellows have driven the repellent into the hive, dispersing the bees. The right hand photo shows the hive with the temporary top removed to show exposed combs free of bees.