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## **Bee Health Advisory May 15, 2024**

### **Delaware Bee Colonies Show Varying Levels of Resistance to Products Containing Amitraz for Treatment of *Varroa***

All beekeepers using Apivar or Amiflex (active ingredient amitraz) miticides should be aware that *Varroa* mites are developing resistance to amitraz. When using Apivar or Amiflex, the Delaware State Apiarist recommends that beekeepers conduct mite counts by alcohol wash before and after treatment to ensure the mite load has decreased. Keeping long-term records can also help beekeepers to see if a product is losing effectiveness over several years of application.

Recent inspections show high mite counts in many Delaware colonies treated with amitraz. In addition, lab results on mite samples sent to the University of Maryland and USDA Baton Rouge labs show resistance levels ranging from emerging resistance to high resistance. Apiaries with high levels of resistance are likely to experience treatment failures when using amitraz. When purchasing nucleus colonies or packaged bees, ask the seller what treatment methods they have used on their bees and plan accordingly. A history of treatment with amitraz makes colonies more likely to have resistant mites.

Anyone using pesticides to treat their bee colonies must read and follow the directions on the label, including treatment durations. Leaving Apivar strips in colonies past the end of the treatment duration can lead to ongoing low-level doses of miticide, which can cause mites to develop resistance. The label is the law, and misuse can potentially reduce the effectiveness on *Varroa* mites. For more information on using integrated pest management for *Varroa* mites, visit <https://de.gov/honeybees>.

All beekeepers are required to register their hives annually with the Delaware Department of Agriculture. Registering your hives is free and allows you to be directly notified when a bee health advisory is issued. Visit <https://de.gov/honeybees> to register online.

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