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### Yellow Jacket Control in Bee Yards

I was conducting a routine sugar syrup feeding for one of my hives this July when a robbing frenzy ensued. Within a few seconds my legs were on fire – yellow jackets! Multiple wasps made their way up my pants legs stinging repeatedly the entire time. While I'm a big fan of pollinators, something needed to be done quickly for both my bees and for my own safety. But what? Anything I could think of had the potential to harm honeybees. I decided to start by learning all I could about yellow jackets and that led me to successful short and longer term solutions.

The most immediate concern was a method to destroy the yellow jackets adjacent to the honeybee hive. This involved two successive night-time applications of boiling soapy water poured into their nest entrance and then covered with a concrete block. While this was effective in the short term for this single hive, I continued to see a lot of yellow jackets on my property, indicating a need for a longer term approach effective for additional but unseen nests on or near the entire property.

I learned from my research that yellow jackets are attracted to and scavenge for protein during Spring and Summer, particularly white meat chicken. Since honeybees are not attracted to meat, this offers an opportunity for tainting meat with an appropriate insecticide; the meat will attract yellow jackets (and paper wasps) but not honeybees. I adapted a method described for use in recreational parks (Rust et al <https://ucanr.edu/sites/ucurbanpest/files/249180.pdf>). Although not included in the research article, I decided to improve the attractiveness of the bait station by including a lure.

## Materials:

- 9.1% fipronil (over the counter flea and tick treatment: Example-PetArmor for Dogs, Flea and Treatment (Amazon <https://a.co/d/7tJCyJE>)
- 4.5 ounce can white meat chicken (Swanson)
- ½ package yellow jacket lure Example-RESCUE! Yellowjacket Lure (Amazon <https://a.co/d/e4QP2ss>)
- Cotton ball
- Cage with roof to protect bait from rain and scavengers such as raccoons (I used an old suet bird feeder on which I fastened a block of wood for rain protection; chicken wire fastened between boards could also work)
- Containers for bait (e.g. plastic cup) and lure (e.g. perforated lid)

## Method:

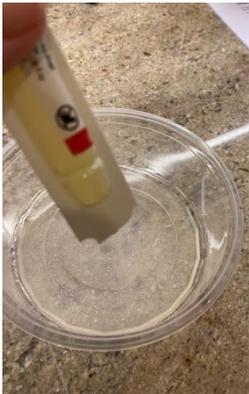
1. Strain and reserve all juices from the canned chicken. A 4.5 oz can should yield about 75 ml juice and 75 grams meat.



2. Finely mince chicken and set aside.



3. Remove 5 teaspoons of juice from reserved liquid and place into bait container (freeze remaining liquid for later use or discard).
4. Add 4-5 drops of fipronil to the 5 teaspoons of juice and mix well



5. Add minced chicken meat to the tainted juice and mix well.



6. Divide tainted meat into 2 roughly equal portions. Refrigerate until ready to use (be sure to mark as POISON / INEDIBLE!).
7. Add ½ package lure to a cotton ball and place into plastic bait container. Place perforated lid over cotton ball. Place 1 portion of tainted meat into bait container surrounding the lure. Place Bait container into cage and hang from a tree for 1 week.



8. After 1 week, replace any remaining meat in the bait container with the retained (refrigerated) portion.

9. Each 650 feet of property will require an additional bait station. Each bait station should be placed at least 20 feet from honeybee hives.
10. Yellow jackets should take small pieces of the tainted meat to their hives where the fipronil will have a systemic effect on the entire hives, killing workers and queens. It is important to mince the meat into very small pieces for this to be effective.



11. Treatments can be repeated as needed; however, into late summer and early fall, yellow jackets will stop foraging for meat and will turn their attention to sweets. Traps may be a better solution during that period.

I have not observed many yellow jackets on my property after using the fipronil tainted meat method for two weeks. I plan to utilize yellow jacket traps next Spring to add prevention as a part of this control plan.