

July/August 1994

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Briefs

Swap meet -- George Bristol called to say that the Beekeepers' Swap Meet and Picnic, scheduled for Saturday, October 15th, has been canceled.

New Cap -- Precision Plastics, in Stockton, CA, is selling a "Hi-Flo" Spout Closure that they feel is the best of them all for honey bears and squeeze bottles. They have a much larger diameter tip than competitors stock; they are available in 10 colors; they are a nice shiny polyethylene; and they cost LESS than competitors' spouts. Call Kim at 800-289-2583 to place an order or call Wayne Cohen, VP of Marketing, at (209) 948-8075 for distributor information.

WAS Meeting -- In order to comply with California corporate law and to maintain the continuity of the Western Apicultural Society, a single day session is being held this year. On Saturday, October 15th, there will be a Delegates and Directors' Meeting, followed by the Annual Business Meeting, followed by another Delegates and Directors'

Meeting. All this will occur at the UC Davis Bee Biology Facility. For more details and a set of instructions for getting to the Bee Biology Facility, please contact WAS President Jim Bach at the Washington Department of Agriculture, Plant Services Branch, P.O. Box 42560, Olympia, WA 98504 [(206) 902-2068].

CSBA Convention -- The main program of the California State Beekeepers' Association Convention will be held on Tuesday, Wednesday, and Thursday; November 15-17; at the Embassy Suites Hotel in S. Lake Tahoe. The hotel is located about 100 feet from the nearest casino. More on the Convention program in my next newsletter.

Yellowjackets

Call them "meat bees", yellowjackets, or whatever, there are a lot of them around this year. Always a nuisance in the foothills and mountains, this year they are causing problems in the valleys as well.

Yellowjackets are predatory wasps that perform a very valuable service as biological control agents during the spring and summer. As life cycles of the prey wind down for the year, certain species of yellowjackets quit seeking prey and become scavengers. This is when they can really become a nuisance. Not only are they around in surprisingly large numbers, but their combative style of food gathering spills over from prey to inanimate food supplies. Shooing them away or whacking them with less than lethal force can result in their rapid return and possible use of their sting.

In most cases the yellowjacket populations dwindle down to only hibernating, mated females for the winter. The first "killing frost" accelerates the process in cooler climates. In mild climates, the wasps sometimes build huge, multi-family, persistent nests that really are spectacular. This is especially true if they happen to fill up an empty closet, as they did in one person's house.

How can these nuisance populations be controlled?

To be truly effective, the nests must be eliminated. There are many yellowjacket traps available that use pheromone or various baits to lure scavenging wasps into a trap from which they cannot escape. It may give you a sense of satisfaction to see hundreds of wasps being taken out of circulation, but bring out a picnic lunch and see if you have attained control!

If the nest can be located, there are chemicals on the market that can be applied to the entrance area and as much of the nest as possible. Continued contact with the "wasp and hornet spray" should

lead to population extinction. From the standpoint of defensive behavior, it is better to apply the treatment at night, when the wasps are least likely to fly. The risk of being stung cannot be reduced to zero. Commercial exterminators can be located in the "Yellow Pages", if this doesn't sound like a do-it-yourself project.

Another effective approach is use of poisonous baits. The theory is: add an undetectable, lethal dose of poison to a food item that is attractive to scavenging wasps. The foragers pick up the bait, bring it back to the nest, share it with other individuals, and all are poisoned.

There used to be a kit on the market that contained a plastic bait holder, about the size of a pop can with small holes drilled in it to allow only wasps to get to the bait. The kit is gone from the market, but the pesticide still is available for use in eleven western states. The following information comes from the "Supplemental Label" for KNOX OUT[®] 2FM Flowable Microencapsulated Pesticide.

1. Determine a food substance the scavenging wasps like by running a little preference test (all substances ground to 1/8" diameter or less): canned pet food, especially fish-based cat food; cooked poultry, fish, or ground beef; processed or canned meats, like cold cuts or ham, etc.

2. Make a bait container ("dispenser"). They suggest a four to six ounce, NON-FOOD container with a removable top. Drill three to six holes (5/8" to 11/16" diameter) in the side of the container, close to the top, and a couple more holes for attaching a wire hanger.

3. Mix only as much bait as can be totally used in the bait stations -- don't store it. About 3 ounces (6 level tablespoons) of preferred bait food with 1/2 teaspoon of KNOX OUT[®] 2FM should be used in one container. Increasing the dose of pesticide will make the bait repellent to wasps. Unfortunately, the pesticide is now available only in large, bulk containers. You won't even notice the difference after many 1/2 teaspoons have been removed.

4. Seal the container well (in case a mammal becomes interested in the contents) and hang the dispenser out in the open, around the periphery of the area to be protected. The labeling recommends 3 to 4 dispensers per acre, placed about 100 feet apart.

5. Replenish bait as long as yellowjackets keep visiting the dispenser. After a couple of days at 90°F or above, the bait will become unattractive. If possible, bait should be stirred daily to keep fresh surface available.

6. When wasps are gone, dispose of bait and dispensers according to directions on the labeling. DO NOT try to clean the containers and use them for some other purpose. Common sense would tell you never to use old food jars or cans for this purpose, because somebody might accidentally eat the contents or reuse the container for food. But, when you start looking for containers, used food containers usually catch your eye, first. Be sure this bait gets to its intended target and not into cats, dogs, raccoons, possums, bears, humans or other meat eating animals.

For further information on availability and use of KNOX OUT[®] 2FM, contact the manufacturer, Elf

Atochem North America, Inc.,
Agrichemicals Division, 2000 Market
Street, Philadelphia, PA 19103-3222
[(215) 419-7219].

Bee Clubs

It seems like participation in many organizations has dropped off a lot over the past few years. The reasons for this change could be many, but the groups appear no longer to be meeting a need. What were the needs of beekeepers in the past? They desired to share information with other experienced or learned members so they could get the most out of bees and beekeeping.

Apparently, sharing information is not as attractive as it used to be. Why? Does everybody know everything he or she wants to know? Have our emphases on tracheal mite, Varroa mite and Africanized bees become boring and of little true value? Is nothing new and interesting being found out about honey bees? Maybe not, but I do not believe this is so.

Just thinking about honey bee stings brings many interesting aspects to mind:

1. What kind of repellent or procedure can be used to neutralize a severe stinging situation with defensive honey bees? (DEET, "wet" water).

2. What does a single sting do to human physiology? (Painful, red bump to quick death).

3. What do multiple stings do to human physiology? (Precipitate heart attacks, destroy tissues that can clog kidneys, cause death by massive toxic effects).

4. What value does beekeeper immunoglobulin G (antibody) to venom components have for other people? (Protection from anaphylaxis, protection from kidney damage).

5. What value does honey bee venom have in treating medical conditions? (Desensitization to bee stings, treatment for symptoms of arthritis and multiple sclerosis, venom fraction hooked to antibody against cancer cells kills those cells.)

How can you find out about such information? No one can read all the journals, magazines and books. But, as a group, your exposure to such information is much greater. Share it!

Bee thievery seems to be much higher than normal this year, at least around the lower Sacramento Valley. How many beekeepers are involved? Is there a pattern or some sort of similarities for the losses? Would you recognize the stolen equipment if you saw it? Your chances would be a lot better if everyone was involved in this together.

Following is a list of beekeeping organizations around California. Where possible, I included their scheduled meeting times, current contacts, and extracurricular activities. These groups are all worth joining, but you are only going to get out of them what you put into them.

Trial Membership

The California State Beekeepers Association is looking for new members right now. Apparently, some people have contacted the CSBA for information, or even paid dues, and never heard another word. That is a regrettable, historical fact that has been remedied. The CSBA is so eager to prove that, they will provide any non-member with a 1994 trial membership, just for contacting Kathi Brand, CSA Sec/Treas, at 1518 Paradise Lane, Los Banos, CA 93635 [(209) 826-8065: phone/FAX].

OK! So the trial membership at this time of the year only means receiving a copy of the upcoming Bee Times and a registration packet for the upcoming CSBA Convention, to be held at S. Lake Tahoe, November 15-17, 1994. Do you want to know what is going on with Senate Bill 250, which was designed to provide certification training for structural pest control operators and others who want to do

"bee removals?" Do you want to know more about keeping bees in areas of Africanization (if California ever has any such areas!)? Are you interested in what the National Honey Board is doing with your assessment fees? Would you like to learn more about marketing honey than simply feeding it to the government one last time? Would you like to meet those people from whom you have been buying queens for so many years? This is your chance. For a 29 cent stamp, or less than a dollar phone call, you can find out about this group and what it does. Take the plunge. You have very little to lose and very much to gain.

AHBS

Quite a few years ago, world reknowned honey bee taxonomist, Dr. Friedrich Ruttner of Austria, stated that Africanized honey bees should not be a problem in the United States. This was based on a

logical, but very imprecise, concept that tropically adapted honey bees do not do well in temperate climates.

Based on winter temperature data, Dr. Orley Taylor and Marla Spivak (1984) predicted many years ago that Africanized honey bees would only inhabit Florida, Southern Texas, and the Yuma, Arizona, area if they stopped their northern population expansion at about the same latitude as they did south of the Equator in Argentina.

Later experiences with Africanized honey bees at higher elevations (colder weather) convinced Dr. Taylor to expand his predictions for the area of potential invasion. Some of Dr. Taylor's peers even predicted population expansion over half the U.S.

As we approach the fall of 1994, it appears as though the AHB population expansion has slowed down dramatically. From 250 to 300 miles per year, the "front" has become pretty stationary during the last 1/2 year. There are probably numerous contributing factors that have led to this result, but none seems to stand out on its own. The fact is that Dr. Ruttner's assessment was correct. Things that we don't even think much about could be important. We know that increasing and decreasing day length are very important seasonal cues to honey bees, birds and mammals in temperate climates. Increasing and decreasing brood rearing and instigation of migration often are linked to day length. Do these annual environmental cues, so important to temperate climate animals, affect tropically adapted animals? Do honey bees from areas of nearly constant day length get disruptive

messages from our environment? We may never know.

Dr. Tom Sanford wrote a very nice article on AHBs in his recent issue of APIS (Vol. 12, No. 7, July 1994). In the title he asks, "AHB Invasion Runs Out of Steam?" Obviously, the Floridians are watching AHBs very closely, because most of their state seems to be well suited for supporting AHBs.

Tom cites the following as possible factors that have slowed AHBs down: 1. local weather (colder winters, later springs) unfavorable for feral bees; 2. Varroa mite; 3. tracheal mites and/or bee diseases?; 4. imported fire ants are predators of AHBs in Texas; and 5. hybridization with EHB stocks, especially feral EHBs of colonial lineages.

Does this mean that it is "all over?" Not quite. I really hope that one possibility that Tom mentions, that "perhaps the AHB [in Texas] will take some time to reach saturation in certain areas before the invasion can continue", does not occur. If it does, I believe that it will be the first time that the expanding front stopped, regrouped, and started up, again.

Does this mean that California won't be invaded? Not quite. I readily admit that I expected AHBs to cross the Colorado River last spring. There have been numerous finds of AHBs in Yuma County, Arizona, (a very large county). I still do not believe that the Colorado River is really a barrier keeping AHBs on the other side. The rapidity with which AHBs moved through Tucson and into Phoenix and Yuma, suggested to me that California, south of the Tehachapi Mountains, was going to have visitors, soon. But, it didn't happen.

Finding AHBs in California, now that they aren't going anywhere very quickly, isn't going to be nearly the story it would have been last spring. A few stray swarms across the river is not the same as the leading edge of a seemingly never ending flow of unacceptable genetic stock into our midst. Beekeepers in Imperial County should still be watching for peculiar colony behavior that might suggest some genetic introgression from AHB drones. But, they don't have to worry about hoards of AHB descending on their operations.

Did we spend too much time and effort preparing the state for an invasion? I don't think so. We provided a very large amount of information about bees and beekeeping to an extremely large

audience. San Francisco TV station KGO is coming to campus to film an interview on the "invasion that didn't happen". I believe that all this emphasis on honey bees has raised the "consciousness level" of the public about them and that beekeeping benefited from the exposure. Now, if we could just convince everyone to eat more U.S. honey!

Sincerely,

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