

Buzzword



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Next Meeting

Tuesday,

September 16, 2003

Building a Honey House

By Joe Grubbs

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ApiLife-Var Gets Section 18 in 6 states

Kim Flottum, Editor, Bee Culture Magazine
<http://www.beeeculture.com/beeeculture/index.html>

The EPA has approved a Section 18 use permit for ApiLife-Var, a thymol based product used to control varroa mites in beehives, for use in Indiana, Maine, Minnesota, Mississippi, South Carolina and Utah. The product, when registered in each of these states will be available from Brushy Mountain Bee Supply in North Carolina. They must still apply to each of these states for registration, and have that registration approved before the product can be used. Typically, this is a fairly routine process and, when complete, the product should be available about August 1, 2003.

Beekeepers should contact their state Beekeeping Association, or their state Apiarist for additional information. These contacts can be found on Bee Culture's web page (www.beeeculture.com) listed in our Who's Who in Apiculture. State Associations, State Apiarists or Extension Specialists can contact IR-4 directly (732.932.9575, ext. 610) for additional information.

Currently, IR-4 is conducting additional residue trials so a Section 3 (general use) label may be considered next season. When available, ApiLife-Var can be used only in late summer or fall applications.

Balling the Queen

David Cramp, *Apis UK Newsletter*

The subject of balling the queen has long been a subject of discussion amongst beekeepers and yet still its reasons remain largely a mystery. Perhaps this could be an interesting subject for a bee research student (Post Grad Diploma/MSc/PhD etc) looking for a subject to investigate in depth. I have seen queen balling twice, both times on the same day with different queens and both times after introducing a new queen to a colony. Each time, I poked the ball around for a bit with my finger until I realised that I was making matters worse and each time I hurriedly re-caged the queen and let her out at a later date. Neither of the queens did well. (But of course that could have been for many different reasons, including my rough handling of the queens when attempting to rescue them!). In this illuminating article John Yates looks at the subject from the scientific, anecdotal and personal experience points of view.

only come across balling once or twice during my beekeeping career which started in the early 1940s and always in circumstances that could be classed as normal.

There is very little information about this behaviour pattern in the classical literature and what is available is regrettably contradictory in places and not very exhaustive. Five well known sources were consulted, some living, some dead and the salient points of my search are listed below:

1. All sources seem to be agreed that when balling of the queen occurs, a sphere is formed consisting of about 25 to 50 workers surrounding a trapped queen. The size of the ball is about that of a walnut. Odd clusters of two or three bees fighting each other may be in the immediate vicinity.
2. Three sources consider balling to be an

(cont'd. on page 3)

Balling the queen could be classed as an abnormal bee behaviour because it is comparatively rare. I have

Northwest Corner Fall Conference

This is a tri-state event including the Washington State Beekeepers annual meeting.

Where:

Hood River, Oregon at the Hood River Inn

When:

November 6, 7, & 8.

Visit www.orsba.org for more details.

BASICS IN NORTHWEST BEEKEEPING

Adapted from Ron Bennett (<http://members.aol.com/beetools/>)

September starts our Fall management planning and preparations, and protecting your bees from their neighbor hives and yellowjackets. The worst problem beekeepers face in late Summer and early Fall is robbing. Don't tempt robber bees by exposing honey. Don't work the brood nest unless necessary; stop if robbing starts. One of the best methods to minimize robbing and help your colonies stave off the yellowjacket onslaught is to reduce entrances to a bee space sized slot after hot days are over.

The major nectar flow is over now and the bees are starting to wind their populations down for winter. But, the populations are still high and there are some flowers around (dandelions, Queen Ann's lace, Pearly Everlasting, Japanese Knotweed, and others) for the bees to work. For colonies that are light in

stores start feeding them a heavy sugar syrup (2:1 sugar/water by volume) until the colony's gross weight is about 150-180 pounds.

It is advisable to use a sticky board and monitor a 24-hour varroa mite-drop with mite strips. A count of 25 mites or less usually indicates that mite treatment is not necessary. However, if your hives are infested with varroa mites and if you have determined that mite strips are the best course of remedial action then the strips should be in the hives by now. Also remember to remove the strips within the specified time period (6-8 weeks) otherwise you will only be helping to induce resistance in mites, which will lead to future treatment problems for all beekeepers.

Keep on the lookout for American Foulbrood, Chalkbrood and Nosema. Watch for signs of tracheal mites by looking for bees with the K-wing appearance

or for bees crawling in front of the hive. Treat for tracheal mites as appropriate with either formic acid or menthol. However, remember that both these courses of action will require 60 degree or higher days of temperature for effectiveness.

Check your stored comb for possible wax moth infestation. Wax moths (like rust?) never seem to sleep. They can ruin all of your precious combs in little time. You can effectively prevent wax moth infestations by keeping your supers bagged in large plastic trash bags. Freezing infested combs in a freezer will also kill all the wax moth eggs and larvae. You also need to protect any stored equipment and combs from mice. They will burrow through your stored combs, eat your combs (especially honey supers) and build nests in the boxes.



"O bees, sweet bees!
that nearest field
Is shining white
with fragrant immortelle.
Fly swiftly there and
drain those honey wells."

- Helen Hunt Jackson
My Bees

Recipe Corner Blueberry Coffecake

Place blueberries in bottom of greased 9-inch round cake pan; distribute evenly. Sprinkle with flour; drizzle with honey and lemon juice. Set aside.

In small bowl, combine flour, baking powder, baking soda and salt; set aside. In medium bowl, combine honey, eggs, milk, lemon juice, lemon peel and vanilla; beat with fork until well mixed. Add flour mixture; mix well. Stir in melted butter; mix well. Pour batter over blueberries in pan; spread to cover evenly. Bake at 350°F for 30 to 35 minutes or until toothpick inserted in center of cake comes out clean. Cool in pan on wire rack 10 minutes. Invert cake onto large plate; cool completely. Makes 8 servings.



Organic Honey Standards

Anyone considering moving to the organic designation should get on the distribution list for a periodic information resource from the Organic Trade Association. The September issue discusses eating in schools and a September 23 teleconference on "The True Costs of Our Family's Food." To register call, 781-648-7157 or e-mail: sue@mcgov.com.

Website: <http://www.ota.com>

Ingredients

- 1 1/2 cups all-purpose flour
- 2 tsp baking powder
- 1/2 tsp baking soda
- 1/2 tsp salt
- 1/2 cup honey
- 2 eggs
- 1/4 cup milk
- 2 Tbs fresh lemon juice
- 1 tsp fresh grated lemon peel
- 1 tsp vanilla extract
- 6 Tbs butter, melted

Blueberry Topping

- 2 cups blueberries, fresh or frozen
- 1 Tbsp all-purpose flour
- 1/2 cup honey
- 2 Tbs fresh lemon juice

BALLING THE QUEEN (CONTD. FROM PAGE 1)

- attack upon the queen and two consider it to be protective behaviour (curious because the queen always dies as a result of the balling unless the beekeeper intervenes).
3. During balling, the queen's appendages are damaged as a result of the bees biting the queen.
 4. The cause of death is variously attributed to stinging by the workers and then eviction; being deprived of food and air; and another source does not give a cause of death but states that the queen is never stung. Perhaps all are correct under different circumstances.
 5. During balling, a hissing sound is heard in the colony. (Could this originate from the queen and be confused with piping?).
 6. All sources seem to agree that dispersing the ball is best done by immersion in water and caging the queen for re-introduction.
 7. Most of the sources seem to agree that it is more prevalent amongst the darker races of bee (A.m.m).
 8. The causes of balling have been attributed to a variety of reasons, including:
 - * Unseasonable disturbances usually in the early spring (all sources agree on this).
 - * Premature examination of the queen after introduction.
 - * The queen acquiring a strange odour as a result of being handled. (Soap, nicotine etc).
 - * The queen being frightened.
 - * Poor weather when stores are short or during robbing.
 - * At times of stress when the queen cannot be replaced by the bees.
 - * To protect the queen from another queen.
 - * Frequent and inept inspections causing colony stress.
 - * When a young queen is just beginning to lay after a long break.
 - * When a queen has recently been introduced.
 - * Occasionally when a queen returns from a successful (but not unsuccessful) mating flight.
 - * During uniting when sometimes both queens can be balled.

I'm sure that you will agree that noting all of the above points tends to confuse rather than to clarify the issue. Note also that it has been reported that queen losses have occurred as a result of using the outdated tobacco smoke test for varroasis. The mechanism could be the workers balling a comatosed queen.

Brother Adam pointed out that balling is an 'everyday occurrence' with the Tellian bee (A.m intermissa) and since most of our mongrels have been derived from this bee it seems that the observation about the dark bees could be correct. I have heard that the balling characteristic of the Tellian bee could have its origin in nest defence, attacking a larger adversary by surrounding it in a ball and killing it as a result of high temperature generated in the ball, e.g. the tropical hornet which is a pest in Algeria. If so this would correlate with the statement that the queen is never stung to death and is more prevalent in the darker races. The Eastern honeybee, *Apis Cerana* has evolved in regions where hornets are common and SJ Martin has pointed out in a lecture to the Central Association in 1994 that these bees have developed a collective behaviour pattern as a defence against hornets which results in balling by around 250 bees and killing the hornet by raising the temperature within the ball to about 47 degrees C (117F). (The mandarin hornet suffers this treatment when it attacks nests. Ed). I have not seen any reference to *Apis cerana* balling their own queens but that may be due to lack of study on my part about this species of bee.

The only scientific work that I know of, referred to by Janet Dowling in BKQ 39 was undertaken by Lensky. He induced balling by putting extracts from the koschevnikov glands of young queens onto worker honeybees. Atrophy of these glands occur in mated queens older than one year. It seems clear that there is no scientific explanation available as to the origin of the cause of balling and most of the reasons put forward are considered by me to be guesses or flights of fancy. In the case of Lensky's work, if pheromones are released by the queen from the koschevnikov gland which induces balling, the queen appears to sign her own death warrant.

The facts remain one of those beekeeping mysteries. Our own experience is limited to two or three occasions over many years. The most recent was a few years ago in about May. Dawn and I were undertaking a routine inspection of all colonies in one of our apiaries and it happened in the last colony. The supers and queen excluder had been removed to inspect the brood chamber. About half way through the colony manipulation, Dawn heard the queen piping (Could this be the hissing sound reported by one source mentioned above?). This is something I have never heard in my life, no doubt due to a hearing deficiency. The queen was found on the last frame and was being balled. She was caged in a Butler cage, plugged with a wooden plug and put into the middle of the brood nest. Two days later she was released and she continued to head the colony successfully until the following Spring when she was replaced.



Refreshment Schedule

Sep: Mike Hoey, Betty & Walter Schicker
Oct: Mary Monroe & Day Slechta
Nov: Nancy Jones

If you are unable to fulfill your commitment to provide refreshments for a meeting please notify Barbara Stedman by giving her a call at 360-692-9453 before the meeting date.

Marketplace

at
 WestSoundBees.org

Still accepting your advertisements for free.

This is an online page free to WSBA members to advertise honey, wax, pollen, pollination services, or other bee-related goods for sale or if you are seeking beekeeping related goods and services.

Please contact Stephen at phone 779-1210 or email Stephen@lalgudi.net

Editor's Note:

Articles of interest to beekeepers and announcements of interest to Association members are welcomed and encouraged.

Submit articles and announcements to Stephen Augustine:

Email: stephen@lalgudi.net
 Mail: 401 B Liberty St NW
 Poulsbo, WA 98370

FALL MANAGEMENT

The basic principle of Fall Management is to ensure that your colonies are healthy, strong and free of diseases/pests as they go into the winter. Additionally, you should ensure that each colony has adequate honey stores as this is the food they will subsist on from October until March of next year. Lastly, you should ensure that each hive is adequately ventilated. In the Puget Sound area the winter killer is not the cold but the moisture. As bees consume food stores they will release significant amounts of moisture. If this moisture does not have an outlet to escape it will condense on the inner cover and drip on the winter cluster – chilling them and ultimately leading to the colony’s demise.

In regards to treatments for diseases and pests an Integrated Pest Management (IPM) approach is recommended. That is, after sampling or careful observation if the colony exhibits signs of the disease or problem then use an appropriate treatment. Prophylactic use of the various treatments generally selects for resistance in the pest or disease rather than helping the bees. Here is a recap of some of the different treatments that you might use.

Sugar Syrup for Feed	2:1 by volume of sugar and water, feed until the gross weight of the colony is about 150-180 pounds.
Fumidil-B for Nosema	One teaspoon of Fumidil-B dissolved per gallon of sugar syrup, two gallons of medicated syrup per affected colony.
Terramycin for AFB	Mix one teaspoon of Terramycin with two tablespoons of powdered sugar. Spread this amount on the ends of the frames, and repeat every 3 to 5 days until three treatments are given to each affected hive.
Grease Patty for TM	Keep grease patties (vegetable oil or shortening and powdered sugar) above the brood nest continuously to reduce the incidence of Tracheal Mites.
Menthol for TM	One 7x7 inch (1/3 cup) menthol packet on top of brood nest. Remove the packet after 4-6 weeks.
Formic Acid for TM	Soak absorbent pad with 30ml of 65% formic acid and place on top bars. Three treatments at intervals of five to seven days. Remove used pads each time.
Formic Acid for Varroa	Soak absorbent pad with 40ml of 65% formic acid and place on top bars. Five to six treatments at intervals of five to seven days. Remove used pads each time.
Sugar Dusting for Varroa	Dust individual frames with ordinary powdered sugar as described in the July issue of Buzzword.
Apistan Strips for Varroa	1 Apistan strip per every 5 frames covered by bees, hung between the frames of the colony cluster (usually 2 to 4 strips are needed per colony). Apistan should NOT remain in the colony longer than 42 to 56 days (6 to 8 weeks).



West Sound Beekeepers Association
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<http://www.WestSoundBees.org>

Next Meeting– Building a Honey House
 Tuesday, September 16
 7 p.m. at Stedman’s