



BEEKEEPING NEWS

April, May, June 2013

a local chapter of NORTH CAROLINA STATE BEEKEEPERS ASSOCIATION, INC.

Meetings & Programs

* No regular meeting in April

• **Saturday, April 13th, 10:00 a.m.-2:00p.m.**

Field Day at Hagan-Stone Park, Shelter #5

5920 Hagan-Stone Park Rd., Pleasant Garden, NC

Our site, www.guilfordbeekeepers.org has information including a park shelter map.

Shelter #5 holds over 100 and has bathroom facilities and electrical service. Remember to **bring your folding chair** if you want to sit outside before and after the meal.

Field Day Events: Club members will provide a demonstration of hive manipulation and we will have mini presentations on a variety of subjects. This is a perfect opportunity for new beekeepers to compare notes, ask questions, and socialize with fellow beekeepers.

The club will provide hamburgers, hotdogs, fixings, and soft drinks. Members are requested to bring side dishes and desserts to share.

• **Tuesday, May 14th, 6:30p.m.** (covered dish meal)

We have requested a speaker from Greensboro Beautiful, Inc. Greensboro Beautiful is a non-profit that partners with the city and citizens to enhance the 4 public gardens (Bicentennial, Bog, Arboretum, and Gateway), sponsors neighborhood tree plantings, 2 annual litter clean ups and more. Learn how citizens can work with local governments to provide pollinator friendly places.

• **Tuesday, June 11th, 7:00p.m.** (no meal)

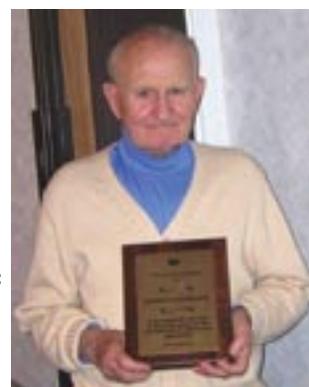
We will be showing a beekeeping webinar with a topic to be determined.



James Henry Bennett, Sr., Passed away at age 85 on February 12, 2013. Born in Stokes County, NC. James and his wife, Magdalene became the “Go-To” folks for many members of the Guilford County Bee Keepers – James to answer bee questions and Magdalene to learn what she had brought to dinner! Their understanding and dedication was recognized throughout the club membership. James was always willing to assist new beekeepers – at their hives or his, and he would follow up with know-how and show-how demonstrations.

James had previously been awarded LIFETIME MEMBERSHIP in recognition of dedicated service to Guilford County Beekeepers. “Tell It To Your Bees”

Robert Douglas Rothrock, Sr. known to us as “Bob” our full blooded yankee from Bloomfield, NJ, passed away at age 94 on January 4, 2013. A veteran of WWII, he was proud of his service and loved his country. When he and his wife, Harriet, moved to Greensboro became an avid golfer, beekeeper, gardner, and joined the NC Bluebird Association. He loved a good story and did not hesitate to lend a helping hand to friends, neighbors, and beekeepers! He was an honest man, a good friend, devoted to his family, and had the gift of meeting no stranger. Be sure to “Tell It To Your Bees”.





HONEY, ARE YOU FOR REAL? (also look at article on next to last page)

11 February 2013

A laser device developed in the hopes of measuring carbon on Mars may soon be used here on Earth to root out counterfeit foods – and make sure that honey, olive oil and chocolate are what they claim.

A cheap fake honey concocted from sugar would be unmasked simply by laser-scanning the carbon dioxide released from burning a few milligrams.

Seven years ago, the Rutherford Appleton Laboratory – RAL – in England embarked on a ‘blue sky’ space research project to develop a new laser technique for identifying isotopes in space.

Today’s equipment is large, bulky and stationary. Samples of, say, polluted soil must be collected in the field, put in a flask and brought to the lab for testing – clearly unsuitable for space testing.

But the new laser ‘isotope ratio-meter’ from RAL Space could change that.

Thanks to its small, lightweight, robust, highly accurate lasers, the device could be sent into space to look for trace amounts of gas in very small samples.

“You take a laser, whose optical frequency or ‘colour’ can be continuously adjusted, beam it at a gas sample, and detect the level passing through the gas,” explained Dr Damien Weidmann, Laser Spectroscopy Team Leader at RAL Space.

As the laser colour changes, the light passes straight through the sample until it reaches a particular frequency, specific to the isotopic gas, that is partially blocked.

“Each molecule, and each of its isotopic forms, has a unique fingerprint spectrum. If, on the other hand, you know what you are looking for, you can simply set the laser to the appropriate frequency.”

Further, the proportions of different isotopes tells us about the history of the formation of the molecule.

“I wanted to develop this to help gather evidence as to whether or not there was life on Mars,” explained Dr Weidmann, adding that methane in the martian atmosphere is not fully understood, and looking at carbon isotopic ratios can help to identify its origin.



Antioxidant Capacity of Honey: Potential Health Benefit

D.H.M Bastps. G. R Sampaio

Summary

Since ancient times, honey (from Apis and other genus) has been used as a medicine for the treatment of wounds, burns, and infection. Recently, honey has been found to have other physiological properties that may positively impact nonchronic communicable diseases and are related to honey antioxidant activity. Phenolic compounds, which are present in honey in low concentration, are the major antioxidant compounds in honey, in addition to other substances such as carotenoids, enzymes, and vitamins. Several in vitro studies have demonstrated that honey has antioxidant activity. However clinical studies are few and there is not, currently, enough evidence to prove that honey ingestion may protect the human organism against oxidative stress.

Nevertheless, the replacement of sucrose by honey is advisable, as honey contains several bioactive compounds.

You will find this little booklet worth the read particularly if you want to go organic in working with your bees. Find it on google





A Comparison of Russian and Italian Honey Bees

*American beekeepers have been using Italian honey bees (*Apis mellifera ligustica*) since they were first imported to the New World in 1859. The standard German honey bee (*A. m. mellifera*), which had been in America for more than 200 years, was by that time ill-tempered, disease-ridden, and less suited for honey bee management. Conversely, the Italian bees*

B*ut Italian honey bees are susceptible to two deadly parasitic mites, the tracheal mite (*Acarapis woodi*) and the varroa mite (*Varroa destructor*), which were introduced into the U.S. in 1984 and 1987, respectively. Colonies contract these mites through equipment sharing and overcrowding, and, once infested, entire colonies can succumb within one or two years. Beekeepers have relied largely on pesticides to control the mites, but many of these chemicals can contaminate the honey and beeswax in a hive. The mites also are becoming increasingly resistant to the pesticides, making the chemicals less reliable and, eventually, ineffective. The high colony mortality that accompanies these two mites is a serious concern of the bee industry today, and various types of bees are continually being examined with an eye toward finding a hardy, productive stock that can resist them.*

Russian Bee Project

Efforts to find a honey bee that is genetically resistant to the varroa and tracheal mites led researchers at the USDA Honey Bee Research Laboratory in Baton Rouge, Louisiana, to Russia. There, on the far eastern side of that vast nation, in the coastal Primorski region around Vladivostok, they found what they sought—a promising strain of *Apis mellifera*. These Russian bees had been exposed to varroa mites for approximately 150 years, much longer than other *Apis mellifera* strains had, and the researchers surmised that the Russian bees could have developed a resistance to the mites. Indeed, subsequent research has shown that these Russian bees are more than twice as resistant to varroa mites than other honey bees. Moreover, they are highly resistant to tracheal mites, the other mortal enemy of bees. Russian bees also tend to produce as much honey as standard bee stocks, if not more. A number of American queen breeders now produce Russian queens for sale. These breeders are located all across the country, but most are concentrated in the South and in California. Many of the Russian queens on the market are hybrid daughters of a breeder queen openly mated to any drone, which may come from a variety of stocks within two miles of a particular mating yard. The resulting colonies are genetic hybrids. Recent research has suggested the hybrids are only partially resistant to mites, but studies at North Carolina State University show that partial resistance is statistically significant when the hybrids are compared to Italian bees. Production of pure Russian queens can be guaranteed only by truly isolating the breeding grounds, as has been done at the USDA's bee laboratory on Grand Terre Island, 25 miles off the coast of Louisiana. Here the drone stock is also controlled.

were and are excellent honey producers, show a gentle temperament that makes them the most popular race of honey bee in North America, have a moderately low tendency to swarm, and have a bright yellow color that makes queens easy to find.

Management of Russian bees Russian bees are quite different from standard Italian bees in several ways (Table 1):

- Russian bees do not build their colony populations until pollen is available, and they shut down brood rearing when pollen is scarce. This characteristic makes them suitable in areas where the main honey and pollen flows occur later in the year, such as the mountains of North Carolina. By contrast, Italian bees maintain a large brood area and worker population regardless of environmental conditions. This trait can result in more bees than the hive can feed and may lead Italian colonies to early winter starvation. It also explains the Italian bee's tendency to rob other colonies of their honey stores.

- Russian colonies maintain active queen cells throughout the brood-rearing season. In Italian colonies, the presence of queen cells is interpreted by beekeepers as an attempt to swarm (reduce overcrowding by establishing a new colony) or to supersede (kill and replace) the resident queen. This is not the case with Russian colonies, as the workers often destroy the extra queen cells before they fully develop.

- Russian bees can vary in color, but they are generally darker than the Italians. Requeening Italian hives with Russian queens can be difficult, and many beekeepers lose their newly introduced Russian queens. Russian queens have a different "odor" than Italians, and parent colonies must become acclimated to this odor before they will accept the newcomers. Beekeepers who intend to go from Italian to Russian bees should requeen a colony in the fall by splitting the hive in two with the use of a double screen (see highlighted information). This will permit the odors to mix but, at the same time, prevent the workers from interacting with the new queen. The old Italian queen should be kept in the lower half, and the new Russian queen should be placed in the upper half in a cage. If a separate entrance is provided to the upper half, only young nurse bees will enter the top portion, and the older foraging bees will return to the lower hive.

Table 1. A comparison of various colony characteristics of Italian and Russian honey bees

Characteristic	Italians	Russians
Varroa mites	More susceptible	More resistant
Tracheal mites	More susceptible	Highly resistant
Brood rearing	Continuous throughout the summer	Usually only during times of pollen availability
Robbing	High	Low
Queen cells	Only during swarming or queen replacement	Present most of the time
Pollination skills	Small difference from Russian bees	Small difference from Italian bees
Temperament	Gentle, less defensive; not likely to sting	Gentle, less defensive; not likely to sting
Color	Light	Dark

The Russian queen should be released from her cage after seven to ten days and permitted to lay eggs for four weeks. During this time, the odor of the Russian queen will comingle with that of the Italian colony. If the Russian queen continues to lay eggs and is being tended by the workers, she has been accepted. After this acclimation period, the Italian queen can be removed, and the colony can be reunited. If the workers do not accept the new queen during the four weeks of acclimation, the requeening process has failed, and the workers kill her. But the colony will still have the original Italian queen, and the entire hive will not be lost.

Hybrid bees tend to lose their initial desirable traits over subsequent generations. Because many commercial Russian bees are hybrids, the queen should be marked with paint to distinguish them from succeeding generations. If the colony contains an unmarked queen, she is probably homegrown and a second-generation hybrid and should be replaced with a new marked Russian queen as soon as possible to preserve the hive's resistance to the mites. When requeening a Russian colony with a Russian queen, it probably will not be necessary to use the extended acclimation period outlined above. Queens usually come in the mail in cages made of wood and wire-mesh. The exit hole is blocked with a hard candy-like substance that the bees must eat through to release the queen. This usually takes several days, after which the queen has acquired the colony "odor" and is readily accepted by the workers. As noted above, requeening an Italian honey bee colony with a Russian queen takes longer because of the Russian queen's very different odor.

Conclusion

Russian honey bees can be a valuable tool in controlling the depredations of varroa and tracheal mites and also in reducing, but not necessarily eliminating, the need for chemical treatments to control these mites. However, the beekeeper must understand how to manage bees of this new stock properly, as they are quite different from the widely used Italian honey bees.

Suggested reading

De Guzman, L. I., T. E. Rinderer, G. T. Delatte, J. A. Stelzer, L. Beaman, and C. Harper. (2001). An evaluation of far-eastern Russian honey bees and other methods for the control of tracheal mites. *American Bee Journal*, 141: 737-741.

Harris, J. W., and T. E. Rinderer. (2004). Varroa resistance of hybrid ARS Russian honey bees. *American Bee Journal*, 144: 797-800.

Rinderer, T. E., L. I. de Guzman, G. T. Delatte, and C. Harper. (2003). An evaluation of ARS Russian honey bees in combination with other methods for the control of varroa mites. *American Bee Journal*, 143: 410-413.

Rinderer, T. E., L. I. de Guzman, and C. Harper. (2004). The effects of co-mingled Russian and Italian honey bee stocks and sunny or shaded apiaries on varroa mite infestation level, worker bee population and honey production. *American Bee Journal*, 144: 481-485.

Requeening Italian colonies with Russian queens

The requeening procedure has frustrated many beekeepers because standard introduction techniques often are not successful when requeening Italian colonies with Russian queens, as the colonies may reject the new queens. Italian bee colonies need more time and separation to become acclimated to Russian queens.

Step 1: Split the colony in half, with the two halves separated by a double screen.

Step 2: Place the old queen in the bottom half and a caged Russian queen in the upper half.

Step 3: Release the Russian queen from her cage after 7 to 10 days.

Step 4: Once the Russian queen has been accepted and has laid eggs for one month, kill the old queen, and reunite the two halves (remove the screens).

Prepared by

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Top 10 Genetically Modified Food Products By Diana Bocco

(google:Top 10 genetically modified food products/discovery channel for full listing)

Like humans, all organisms have genetic material. When scientists alter genetic material, or DNA, it's called genetic modification (GM). Genetically modifying foods or food crops can enhance taste and quality, increase nutrients or improve resistance to pests and disease. In some cases, GM foods help conserve natural resources, because the altered version might require less water or energy for processing. The first genetically modified food to reach our tables was the Flavr Savr tomato. Grown in California, the Flavr Savr tomato received Food and Drug Administration approval in 1994, after two years of testing and assessment. Mounting costs made the crop unprofitable, however, and production ceased in 1997. Creation of the Flavr Savr opened the doors for other GM foods to make their way into our kitchens.

In the U.S., genetic modification has expanded into almost every area of food production. Scientists can introduce some sort of modification into the genes of crops, dairy products and animals. For example, ranchers and dairy farmers normally feed cattle a GM diet, which is in turn passed on to you when you drink milk or eat beef. Do you need to worry about what's on your family's dinner table? And are there some surprising benefits to GM foods? As you'll see, this subject is one hot potato. This won't hurt a bit. As corny as it sounds, genetically modified foods have upset the apple cart. Science can alter foods to add desired qualities, but who's to say it's safe? (There are 8 pages of these with explanations)

For even more surprises move on to see herbicides and pesticides!

Beekeeper uses combination of ingredients to maintain bee health

By Matthew Weaver

Capital Press

MILTON-FREEWATER, Ore. -- An Oregon beekeeper says he has found success using a combination of natural ingredients to maintain his bees' health. Jeff LeFore, 44, is part of LeFore's Farm-Fresh Honey, with locations in Milton-Freewater, Ore., Big Timber, Mont., Rappelje, Mont., and Lodgegrass, Mont. LeFore developed a combination of 14 all-natural ingredients that he uses to keep his hives going.

"It's not extremely scientific, but all I know is what we developed works," he said. David Wick runs BVS, Inc., a virus detection laboratory in Florence, Mont., using rapid-detection technology. He screens bees for naturally occurring viruses. Over time, when people apply essential oil products, it seems to affect bees' immune system, improving bee health and productivity, Wick said. That could translate to improved economics for commercial beekeepers. "In my opinion, it appears to be a cost-effective method of maintaining bee health," he said.

Wick is analyzing the impacts of LeFore's product on bee health. He credits LeFore with having a well-refined formula. "The school of hard knocks has probably applied very well with what Jeff has done," he said. "The people that use it have great results."

About 14 years ago, LeFore's family operation had trouble with the fungal disease chalkbrood. Fungicides didn't work, so LeFore started experimenting with different combinations of natural compounds with antifungal, antiviral and antibacterial properties. "Everybody was losing 20 to 75 or 80 percent of their bees in the winter time," LeFore said. "Our losses have always stayed in the 7 to 8 percent range. This year it was less than 3 percent as a death rate through the winter."

LeFore believes the medication reduces nosema, virus and bacteria levels in the hive and slows down Varroa mite reproduction. The mites transfer viruses and bacteria from one bee to another. "I don't make any claims -- this is what works for us, and there's 26,000 hives of bees that have been running five generations now," he said. Wick agrees essential oils are not a cure for any diseases the bees may be carrying, but work as a proactive, preventative measure.

LeFore doesn't advertise or sell in stores, preferring to let beekeepers spread the word about their experiences with the product. He sells about 500,000 packets each year, mostly to repeat customers. Packets are applied three times a year, twice in the spring and once in the fall. LeFore said he doesn't have licensing plans for the medication. Nor does he particularly want to see the industry overcome all of its adversity, which he admits is a controversial opinion.

For years, the beekeeping industry struggled to make a living when keeping the bees alive was easy, LeFore said. Today, prices are higher because keeping them healthy is difficult. "You don't have to be perfect in this business to make money, you just have to be better than average," he said. "If you can keep more than half of your bees alive, you will still make more money in today's marketplace than you did with all your bees eight years ago."

Information

Contact Jeff LeFore via email at jefflefore@gmail.com

NOTE: This is not an endorsement...for your information only...editor

****check out:*** ARE THE NEONICOTINOIDS YOU ARE USING IN YOUR GARDEN KILLING YOUR BEES?

*The Xerces Society has just released the report, [Are Neonicotinoids Killing Bees?](#) A Review of Research into the Effects of Neonicotinoid Insecticides on Bees with Recommendations for Action

****check out:*** [GreenBeehives.com](#) for supplies & advice on NO POISON beekeeping

****check out:*** USA- HONEY WITHOUT POLLEN MEANS HONEY ENTERED ILLEGALLY IN THE COUNTRY?

Tuesday, 12 March 2013 11:14 Written by Analia Manriquez

Here is a list of the honey tested by Food Safety News that showed no traces of pollen. Analysis showed that the absence of pollen was consistent regardless of the size of the jar. In some cases, the stores where the honey was purchased are not listed because the same brands can be found in many different outlets.

- American Choice Clover Honey
- Archer Farms Orange Blossom Honey
- Archer Farms Organic Classic Honey
- Busy Bee Organic Honey
- Busy Bee, Pure Clover Honey
- CVS Honey
- Fred Meyer Clover Honey
- Full Circle Pure Honey
- Giant Eagle Clover Honey
- GE Clover Honey
- Great Value, Clover Honey
- Haggen Honey, Natural & Pure
- HT Traders Tupelo Honey
- Kroger Pure Clover Honey
- Market Pantry Pure Honey
- Mel-o 100 % Pure Honey
- Natural Sue Bee Clover Honey
- Naturally Preferred Fireweed Honey
- Rite Aid Honey
- Safeway Clover Honey
- Silver Bow Pure Honey
- Stop and Shop Clove Honey
- Sue Bee Clover Honey
- Thrifty Bee Honey
- Valutime Honey
- Walgreen MEL-O honey
- Western Family Clover Honey
- Wegman Clover Honey
- Winnie the Pooh, Pure Clover

Bee Venom Being Used As New Skin Treatment

February 4, 2013 10:36 AM

MINNEAPOLIS (WCCO) – When it comes to looking younger, a new treatment is creating a lot of buzz, and it involves putting bee venom on your face.

That's right, actual bumble bee venom. Prischmann Facial Plastic Surgery in Edina offers this facial and they call it the "Royal Treatment." That's because it's rumored to be a favorite of Kate Middleton, the Dutchess of Cambridge.

Some people will do anything to keep their skin looking young: Botox, fillers, peels and lasers have been all over Hollywood for years. But it is a princess who's popularizing a new cosmetic treatment.

Vanity Fair reported that Kate Middleton, the Dutchess of Cambridge put bee venom on her face before the royal wedding to stay looking youthful.

"The bee venom facial provides a mild inflammatory affect. It makes skin look plumper, increases tone and is extremely hydrating," said Dr. Jess Prischmann.

Prischmann, of Prischmann Facial Plastic Surgery in Edina, brought the treatment over the pond to the Twin Cities. "We sourced bee venom from all around the world and brought it into the practice and went through a test period where we tested, what does the bee venom test from England feel like and what does the one from New Zealand feel like," Prischmann said. "We ultimately landed on the one from our practice, which is from New Zealand."

The facial starts with steam and cleanse, then an exfoliation and next is the bee venom mask. It sits on the skin for 20 minutes while the venom seeps into the skin. After the mask, rose petal toner is applied.

Lastly, this royal facial finishes with Kate Middleton's moisturizer straight from Switzerland.

"It feels very different than any other facial," said client Beth Hoffman, who first tried the bee venom facial on a whim at a girls night at the spa. "It's a plumping facial so my skin felt very plump, clean, the texture felt different."

There are no bee stings involved in the facial, but your skin may turn a bright pink during and after the procedure. "It doesn't hurt, no. It's very relaxing. It's more of a tingling type of feeling," Hoffman said.

If you are allergic to bees, Dr. Prischmann says stay away from this service.

"The bee venom facial can be done at any time. It's great for all skin types. It's not for people who are allergic to bees but there's no down time, so it's a great pre-event facial," Prischmann said.

And while the royals may love this treatment, it's not going to completely eliminate your wrinkles.

"If you go online, you'll see that they say it's a natural alternative to Botox. I don't know if I would believe that completely, I think that's a stretch. But women love it and that's what matters," said Prischmann.



Our web site, www.guilfordbeekeepers.org is your source for local beekeeping information, questions, and answers. Sign up for our forum board and join the conversation!

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- North Carolina State Beekeepers Association www.ncbeekeepers.org



Guilford County Beekeepers Association

A LOCAL CHAPTER OF THE NORTH CAROLINA STATE BEEKEEPERS

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