

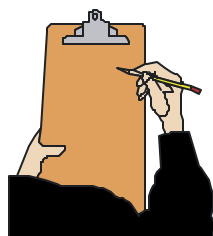
News For South Carolina Beekeepers



November 2002

Vol. 13, No. 3

LOCAL NEWS



The South Carolina Beekeepers will be meeting jointly with the North Carolina State Beekeepers on 14-15 March 2003 in Rockingham, North Carolina. Our beekeeping friends from the Tarhill State will host the meeting, so make plans now to attend and to have a good time of sharing beekeeping information and fellowship. If you are a member of the South Carolina Beekeepers, you will be receiving more information on meeting registration by early February. Our summer meeting is scheduled to be held 10-12 July 2003 in Clemson. Place these important dates on your calendar so that you will not forget to attend these 2 great meetings in 2003.

Three honorary awards were presented at the "South Carolina Beekeepers" summer meeting in July. Frank Palmer of Walhalla and long time member of the "Oconee County Beekeepers" was named the "South Carolina Beekeeper of the Year" for 2002. Frank started keeping bees shortly after he moved to Walhalla in the 1950's. Many of his neighbors kept bees and he got into beekeeping to learn and share knowledge with them. He had a small commercial apple and peach operation and his beekeeping skills became a necessary part of the operation. Frank and his wife, Edna, are very active in their local association and Frank is a long time member of the "South Carolina Beekeepers" and attends the state meetings held in Clemson every year. Frank loves to share his ideas on beekeeping and is a great ambassador for South Carolina beekeeping. Our congratulations and thanks go to Frank for his many years of devotion and support to our beekeeping industry.

Chenille Taylor, a member of the "Oconee County Beekeepers," was presented the "South Carolina Junior Beekeeper of the Year" award which is an award given annually to recognize a beekeeper who is 18 years of age or less. Chenille is 18 years old and began keeping bees 5 years ago with a swarm caught on a neighbor's fence post. She has learned about bees and beekeeping by working with other beekeepers and by attending local beekeepers' meetings and the South Carolina state meetings. She is proficient in every area of beekeeping: overwintering, feeding and medicating, supering, and harvesting and processing honey. She properly identified small hive beetles in her hive in 2001 and has kept them under control. She extracts and bottles her own honey which she sells at a local apple stand in the fall. Chenille harvested 75 pounds of surplus honey from her one hive in 2001. She has faced several beekeeping challenges recently such as having to protect her colony from a hungry bear to successfully re-queening a failing queen late in the year. Congratulations, Chenille. Our hats are off to you.

Howard Hiller, Clemson University Cooperative Extension Agricultural Agent in Oconee County, was selected to receive the "Extension Agent of the Year" award. Howard has worked many years with beekeepers in Pickens and Oconee Counties. He has worked closely with beekeepers in placement of beekeeping exhibits at both county and regional fairs. He maintains a list of beekeepers at the county level who will respond to swarm calls and stays busy in the spring coordinating swarm calls. In Oconee county, Howard has worked closely with the local association the past two years in arranging meeting sites, lining up programs, and attending meetings. He helps recruit new members and sends out meeting notices to beekeepers for their monthly meetings. Thank you Howard for many years of work with South Carolina

beekeepers. Keep up the good work.

Small hive beetles continue to spread in South Carolina. For information on this pest, visit the Clemson University Department of Entomology Website at

<<http://entweb.clemson.edu/cuentres/index.htm>>. Click on Insect Information Series, "Apiculture and Pollination" section and then click on "Small Hive Beetle."



HAPPY "93rd" BIRTHDAY SPANN LEITNER

On 24 November, Spann Leitner will celebrate his 93rd birthday. Spann is our most senior age beekeeper in South Carolina and lives at 1143 Hungry Hollow Road, Winnsboro, SC 29180-8949. Spann kept bees commercially for many years. Although, he is no longer able to physically participate in his favorite pastime, he is quick to share with others his long life experiences with the bees beginning when he was just a young lad. He proudly proclaims to have paid for his house and truck from income derived from beekeeping.

According to a South Carolina Department of Agriculture Farmers Market Bulletin in 1975, Mr. Leitner was elected as vice president of the "South Carolina Beekeepers" that year at the summer meeting which was held at the Leitner Honey Farm near Winnsboro. Spann was selected as the "1989 South Carolina Beekeeper of the Year" and was given a "Life Member" status at that time. For many years, Spann was a frequent and highly sought after speaker at local and state bee meetings where he gladly shared his knowledge and experiences with honey bees and beekeeping. Spann loves to hear from his beekeeper friends, so let's wish him a happy birthday!

Honey Prices Setting Records

Driven by effects of the U.S. antidumping action, a generally short world supply, and the removal of Chinese honey from markets, the U.S. honey market continues to set record prices weekly. Prices are now about 100% higher than they were a year ago.

Through last summer, prices gained steadily, if slowly. In September 2001, prices reported in the ABF Honey Market Faxline were generally in the low 70s. The rate of increase picked up over the winter, and the \$1.00 per lb. price was reported on May 8. By July, \$1.00-plus prices were common, and on Aug. 23, the

Faxline reported a sale of white clover at \$1.30.

Two large lots were reported in the Sept. 4 Faxline as selling for \$1.52 (one lot was \$1.53, drums included).

The annual production survey at the Mid-U.S. Honey Marketing Association indicated those producers expect a crop, which is 68% of normal.

Source: American Beekeeping Federation
Newsletter, 2002, Vol. 60, No. 3

U.S. Customs Service and Food & Drug Administration Uncovers Dumping Scheme Involving Contaminated Honey Imports from China

WASHINGTON, D.C. – The U.S. Customs Service (Customs) and the Food and Drug Administration (FDA) today announced that they have discovered bulk imports of Chinese honey that were contaminated with low levels of chloramphenicol (CAP), a potentially harmful antibiotic and unapproved food additive. The contaminated honey was detected during an investigation into a widespread scheme to evade payment of U.S. anti-dumping duties on bulk imports of Chinese honey.

To date, the investigation has resulted in the detention of more than 50 containers of bulk Chinese honey at U.S. ports. In an effort to evade U.S. anti-dumping duties, this honey had allegedly been illegally transshipped through third-party countries on its way from China to America.

Some of the bulk honey in these containers has tested positive for chloramphenicol, an antibiotic used, in most cases, only to treat life-threatening infections in humans when other alternatives are not available. Use of chloramphenicol is limited because this antibiotic is associated with a very rare, but potentially life-threatening side effect - idiosyncratic aplastic anemia. For the very small number of people susceptible to this side effect, exposure to chloramphenicol could be serious. A "safe" limit of chloramphenicol for such people has not been established. Nevertheless, the probability of this reaction occurring in the general population from food exposure is thought to be very low.

To protect the public from unnecessary exposure to potentially harmful substances, food and animal

feed products containing chloramphenicol are illegal in the United States. Currently, Customs is stopping all suspect bulk honey imports to this country for the FDA to determine whether they contain chloramphenicol. Any shipments containing chloramphenicol will be detained. The FDA is unaware at present of contaminated honey being on retail shelves, but is continuing its investigation into this matter. Thus far, no illnesses have been reported in association with the imported honey.

As part of the investigation, Customs and FDA agents during the past week have executed search warrants on businesses and residences in Los Angeles, Newark, Tampa, and other locations. Australian Customs, Royal Malaysian Customs, and Royal Thai Customs have also executed warrants in Australia, Malaysia, and Thailand. Additional enforcement activity is anticipated in the investigation.

"This investigation should serve notice that U.S. Customs will not tolerate unfair trading practices, especially those that pose potential health risks to the American public," said U.S. Customs Commissioner Robert C. Bonner. "This case is an excellent example of cooperation between U.S. Customs, the FDA, as well as authorities in Australia, Thailand, and Malaysia."

"We will continue to work with our federal and international partners to ensure that products that cross our borders meet our high standards for food safety," said FDA Deputy Commissioner Dr. Lester M. Crawford. "The FDA will take whatever action is necessary to protect the public health from these kinds of activities."

The probe into this scheme began primarily as a dumping investigation. Dumping of a product occurs when merchandise manufactured outside of the United States is sold in the United States at a price that is below the cost of production, or below the price sold in the foreign home market. Foreign manufacturers and or/importers may dump products on the U.S. market in order to gain market share because of political or social concerns or to maximize profits/minimize losses in production.

In Sept. 2000, several U.S. honey producers filed an unfair trade case alleging dumping of honey imports from China. In May 2001, the U.S. Commerce Department issued a notice of preliminary determination which required U.S. Customs to collect anti-dumping duties on imports of natural bees honey

from certain Chinese companies. The duty rates increased between 34 and 184 percent.

The U.S. Customs Attaché in Bangkok, Thailand, subsequently received information that certain honey exports from China were allegedly being illegally transshipped through Thailand en route to the United States. The purpose of the alleged transshipment scheme was to circumvent payment of anti-dumping duties on Chinese honey imports to the United States.

In June 2002, U.S. Customs Attachés in Bangkok and Singapore launched an investigation and began working with their law enforcement counterparts in Australia, Malaysia, and Thailand. Officials from the Royal Thai Customs, Royal Malaysian Customs, and Australian Customs provided substantial assistance. Several domestic U.S. Customs offices joined the investigation, including those in Los Angeles, Newark, Tampa, Houston, Detroit, and Seattle.

Soon, Customs agents found that U.S.-bound Chinese bulk honey was allegedly being transshipped through Australia, Mexico, Malaysia, Thailand, Vietnam, and other nations to evade U.S. anti-dumping duties. During the investigation, Customs officers in Los Angeles drew samples of bulk Chinese honey from several detained containers that had arrived at the local port. A laboratory analysis found that the honey samples contained chloramphenicol. Customs notified the FDA, which immediately joined the investigation given the health issues associated with chloramphenicol. Analysis by FDA laboratories confirmed the presence of chloramphenicol in the imported Chinese honey.

Since the discovery of chloramphenicol in the Chinese honey imports, Customs has been stopping all suspect bulk imports of honey for the FDA to test for the presence of chloramphenicol. The FDA has developed a method to confirm chloramphenicol levels in honey at one part per billion.

The FDA and Customs are continuing to coordinate their enforcement strategies and will be detaining or seizing any honey imports that contain chloramphenicol to ensure that they are not released for human or animal consumption in the United States.

SOURCE: Kim Flottum, Editor, *Bee Culture Magazine*, August 2002, <http://www.airoot.com/beeculture/index.htm>

Varroa Control with Fungal Pathogens May Be an Option Soon

The honey bee is of great economic importance to agriculture not only for honey production, but also for crop pollination. Currently, a parasitic mite, *Varroa destructor*, is the most serious threat to beekeeping because it causes weight loss, malformation, and a shortened life-span in honey bees and serves as a vector of diseases. Without adequate control measures, bee mortality approaches 100% in hives infested with the mites, and colonies can perish within a few months. This destructive mite is now distributed across the United States and most of North America.

Apistan® (tau-fluvalinate) and Check-Mite® (coumaphos) strips are the most widely used *Varroa* controls in the United States and Canada. Other synthetic *Varroa* treatments are labor-intensive, expensive, or leave toxic residues in honey and wax. Mites throughout Europe and North America are evolving resistance to miticides, threatening the bee industry. As a result, there is an urgent need for alternative control strategies that are cost effective, environmentally friendly, and safe for human consumption. As such, microbial control of *Varroa* mites with fungi offers promising new avenues for the beekeeping industry. Unlike bacteria and viruses, these fungi do not have to be ingested to cause infection, but penetrate the host cuticle directly. This characteristic makes fungi potentially easier to apply than other pathogens.

We screened several isolates of the fungi *Hirsutella thompsonii* and *Metarhizium anisopliae*, and found strains of both that were highly pathogenic to *Varroa* at temperatures similar to that maintained by honey bees in a colony. The infection time (the time it took for 90% cumulative mortality of mites) ranged from 4 to 5 days. Treating observation hives with *H. thompsonii* resulted in a significant mite mortality that was sustained over 42 days. Peaks in mortality occurred 3-4 days after the spores were applied. Similarly, in Weslaco, TX, we tested applications of *Metarhizium anisopliae* spores using both dusts and strips coated with the fungus. Both applications methods resulted in satisfactory control of mite populations in honey bee colonies, and these fungal treatments were as effective as Apistan®, even 42 days after application. In addition, the fungal pathogens had no harmful effects in the honey bees and did not affect the fecundity of the queen. At the end of the trial (42 days posttreatment), when Apistan strips were replaced by coumaphos for two weeks, the daily mite-

fall counts were similar to those recorded with Apistan®, during the trial, suggesting that the mite populations were equally susceptible to both Apistan® and coumaphos.

The mite mortality observed was highly correlated with the number of spores we were able to recover from the bees that we sampled at different time intervals. Because workers and drones drift between hives, the adult bees were found to spread the fungus between hives in the apiary. We were also able to recover the fungus from inside the dead mites, confirmation that the fungus was infecting and killing the mites. In addition, the pathogen was found to reproduce on the mites.

We have now established a cooperative research agreement with Sylvan Bioproducts, Inc. which will assist us in developing methods for producing and formulating the fungi for *Varroa* control. Currently, our research aims at developing more efficient application technology to reduce the time required per application, and make the treatments economically viable for beekeepers. Overall, these fungi show good potential for serving as effective biological control agents against the *Varroa* mite. We hope to be able to offer beekeepers this new avenue of control in the near future.

FOOTNOTE: Mention of a commercial product does not constitute endorsement by the USDA.

Source: Lambert H.B. Kanga, USDA, ARS, Beneficial Insects Research Unit, Weslaco, TX & Rosalind R. James, USDA, ARS, Bee Biology & Systematics Laboratory, Utah State University, Logan, UT, July 2002., in [American Bee Journal](#), July 2002.

Honey Energizes Thirst Quencher Beverage

National Honey Board Develops New Sports Beverage Formula

Longmont, Colorado - The National Honey Board (NHB), working in conjunction with the Food Processing Center at the University of Nebraska, has developed a refreshing sports beverage formula with similar nutrient profiles of major branded options. The new formula closely resembles the nutritional value of currently available bottled sports beverages, but with a higher level of potassium than most.

"Some of our preliminary research shows that

honey could be an effective pre-workout energy source that does not induce hypoglycemia," said NHB director of scientific affairs, Marcia Cardetti. "As part of this same research, we have also seen that using honey as a carbohydrate source during exercise significantly improved performance and power during endurance cycling trials."

Another study suggests that combining honey with a protein supplement may boost post-workout recuperation and favor better blood sugar maintenance after exercise.

These and other scientific inquiries into the relationship between honey and the endurance athlete led to the decision to investigate a sports beverage formula supplemented with honey. "Athletes are already using honey as a source of energy." Cardetti explained. "We are applying it to a potential product that will also help in the replenishment of fluids."

The formulas currently include a honey and orange and honey and lemon option. Each delivers a nearly equivalent amount of carbohydrate and calories to manufactured sports beverages, with a superior delivery of potassium, averaging 85 mg. compared to an average 40 mg. for other popular products.

"We are also excited about the taste," Cardetti said. "The honey and fruit combination make this deliciously refreshing and thirst-quenching."

For more information on the formulas, contact the NHB director of marketing, Bruck Wolk, at 800-553-7162.

Based in Longmont, Colorado, the National Honey Board is a research and promotion board that drives the demand for honey generically through marketing, research, promotion, and advertising.

Honey Orange Thirst Quencher

½ cup honey
½ teaspoon lite salt
2 cups orange juice
5 ½ cups water

Combine ingredients. Using lukewarm water will aid in dissolving honey. Then cool. Makes eight 8 oz. servings.

Nutritional information per 8 oz. serving: Calories 75; Carbohydrate 21g.; Sugar 19g.; Sodium 77 mg.; Potassium 85 mg. Provides 12.5% RDA for Vitamin C
Cost per serving: \$0.24.

Honey Lemon Thirst Quencher

½ cup honey
½ teaspoon lite salt
¼ cup lemon juice
7 ½ cups water

Combine ingredients. Using lukewarm water will aid in dissolving honey. Then cool. Makes eight 8 oz. servings.

Nutritional information per 8 oz. serving: Calories 60; Carbohydrate 17 g.; Sugar 16 g.; Sodium 72 mg.; Potassium 85 mg. Cost per serving: \$0.23.

Source: American Bee Journal, October 2002.

Gift Idea - Book

Honey: From Flower to Table

**by Stephanie Rosenbaum
Photographs by Caroline Kopp**

It has been said that John the Baptist lived on it, and Alexander the Great was buried in it. Throughout time, honey has been highly regarded as a powerful elixir, esteemed for its healing and preserving properties. Beekeeping was practiced in ancient Egypt, and cave dwellings in Spain depict figures scaling cliffs to rob hives. No other food compares to honey's place in history, myth, religion, medicine, literature, and lore.

Honey: From Flower to Table is a beautiful gift book dedicated to celebrating the many uses of this amazing nectar of the gods. Fascinating and thorough, the book chronicles the various roles honey has played over time and continents, delineates the basic of Beekeeping 101, describes the process and nature of the bee colony, and offers thirty recipes for the kitchen table or gift basket. Author Stephanie Rosenbaum includes tried-an-true recipes for Honey Power Granola, Honey-Glazed Challah Knots, Ginger-Honey Soda, Hot Honey Lemonade, Baklava, Aunt Roses' Honey Cake, and recipes for healthful smoothies, mustards, and spreads. Since honey is also a natural moisturizer, a good source of vitamin C, and contains hydrogen peroxide, it is an excellent ingredient for balms, salves, creams and facial masks. Honey: From Flower to Table also includes easy recipes for making berry lip gloss, bee balm, avocado-honey mud conditioner, peppermint cream, and honey masks, body scrubs, soaps and candles.

Authentic, unadulterated, and pure, honey is the

only sweetener in nature that can be eaten just as it comes, and it comes in many flavors. Like wine and olive oil, honey changes from harvest to harvest and reflects the taste of its source. Blueberry and cranberry honey is common throughout the Northeast; sage and mesquite honeys are prized in the American West; and eucalyptus, manzanita, and star thistle honeys remain popular all along the pacific coast. Commercial blends of clover and wildflower honey may be the staple in most grocery chains, however, farmers' markets, gourmet shops, and health food stores all stock their exotic favorites. Interest in artisanal honeys is definitely on the rise, with many just discovering what the ancient world knew all along.

The cost of the book is \$18.95, a hard-cover, ISBN 0-8118-3238-4, 120 pages, and a great list of resources.

To order contact: Chronicle Books LLC, 85 Second Street, Sixth Floor, San Francisco, CA 94105, www.chroniclebooks.com, tel. 415-537-4200.

Internet Apitherapy Course

We would like to offer you the opportunity to join our Apitherapy Internet Course (AIC) already given via E-mail in 39 countries by Dr. Stefan Stangaciu, our Romanian Apitherapy expert and also President of the German Apitherapy Society.

The Course now has 98 Lessons and is organized on Three Levels.

At the end of their study, at their own pace because there is no deadline, the students are eligible to take the Final Exam. If everything runs okay, they will receive our Diploma and most important of all will enter into the "world of apitherapy", a wonderful world with hundreds of practitioners and researchers located in over 50 countries.

With all lessons, private questions and answers are sent simply via e-mail; the communication runs smoothly among all participants.

We dare to say that the most important part of this educational program is not the "dry" theory, but the wonderful friendship which is acquired after a few weeks of communication between the students located in various cities of the world and their teachers.

In addition to apitherapy instruction, we also offer personalized advice to each of our students who need private counseling.

For more details on the structure of our course, how to join it, etc., please contact us via e-mail.

AIC Registration Department Team
E-mail: drstangaciu@apitherapy.com

SOURCE: American Bee Journal, October 2002

2003 Calendar

January 7-11, 2003

American Honey Producers
Baton Rouge, Louisiana

January 13-16, 2003

American Beekeeping Federation
Kansas City, Kansas

March 14-15, 2003

South Carolina/North Carolina Beekeepers Joint
Spring Meeting
Rockingham, North Carolina

July 10-12, 2003

South Carolina Beekeepers Summer Meeting
Clemson, SC

August 4-8, 2003

Eastern Apiculture Society Meeting
Bowdoin College
Brunswick, Maine

RECIPES

Honey Popcorn Mix

Prep time: 10 minutes

Baking time: 35 to 45 minutes

Makes 5 quarts

1 cup (2 sticks) butter
1 cup honey
1 cup firmly packed light brown sugar
1 teaspoon salt
½ teaspoon baking soda
15 cups freshly popped corn
2 cups bite-size rice cereal squares (Chex)
1 (9 ½ oz.) can cashew halves
2 cups unsalted peanuts

Melt the butter in a medium saucepan over low heat. Add the honey, brown sugar and salt. Cook the mixture, stirring constantly, for 2 minutes. Remove from heat. Add baking soda and mix well.

Preheat oven to 250°F. Spray two 15 x 10 ½-inch baking pans lightly with nonstick cooking spray.

Combine popcorn, cereal, cashews and peanuts in a large bowl and toss until mixed.

Add honey mixture to popcorn mixture and toss to mix.

Spoon equal portions of popcorn mixture into prepared baking pans. Bake, stirring occasionally, until golden brown, about 35 to 45 minutes. Store in airtight containers for up to 2 weeks.

Tip: Pour popcorn mix into several plastic tubs with airtight lids for individual snacks.

Crunchy Potato Bites

Prep time: 35 minutes

Chilling time: 2 hours

Baking time: 30 minutes

Makes 5 dozen balls

½ cup Dijon-style mustard
a cup honey
2 tablespoons plus ½ cup mayonnaise, divided
2 large potatoes or 2 cups mashed cooked potatoes
2 cups finely chopped ham
1 cup shredded Swiss cheese
¼ cup milk

¼ cup finely chopped onion
1 large egg, beaten
1 teaspoon prepared mustard
½ teaspoon salt
¼ teaspoon black pepper
3 ½ cups crushed cornflakes

For sauce, combine Dijon-style mustard, honey and 2 tablespoons mayonnaise in a small bowl and mix well. Chill, covered, to allow the flavors to blend, about 2 hours.

For potato balls, peel the potatoes and cut into chunks (if using whole potatoes). Combine the potatoes with enough water to cover in a medium saucepan. Bring to a boil. Boil until easily pierced with a fork but not mushy, about 20 minutes; drain well.

Preheat the oven to 350°F. Grease baking sheets.

Mash potatoes in a medium bowl with a masher. Stir in ham, Swiss, remaining mayonnaise, milk, onion, egg, mustard, salt and pepper; mix well.

Shape the potato mixture into 1-inch balls. Roll the balls in the cornflakes. Arrange the balls 1 inch apart on prepared baking sheets.

Bake until browned, about 30 minutes. Arrange on a serving platter. Serve with the sauce.

Tip: If out of Swiss cheese, Cheddar cheese can be substituted.

Respectfully submitted,



William Michael Hood
Extension Apiculturist

COOPERATIVE EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
CLEMSON UNIVERSITY
CLEMSON, SC 29634-0310
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113 Long Hall, Clemson University, Clemson, SC 29634-0365.

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