

Newsletter for October 2015

Monthly Meeting OCT 15 | 7:00 pm

Flavonoids in Honey and Their Importance

Presented by Eugene Grimley III Professor of Chemistry, Elon University



Professor Grimley will talk about the occurrence, identification, and importance of flavonoids in foods, especially in honey.

By the end of the evening, we'll have even *more* reasons to enjoy honey, and will be able to share that information with others.

Please bring a snack to enjoy at social time!

What are Flavonoids? Geoff Leister

Flavonoids are one of the major pigments in higher plants; together with chlorophylls and carotenoids, they contribute to flower, fruit and seed colors, e.g., yellow, scarlet, red, red-purple, violet, purple, and blue. Other flavonoids are colorless to us, but they are visible to honey bees. Bees use these flavonoid pigment patterns, called nectar guides, to find the flower's nectar which they consume in reward for pollinating the flower. To date, about 3,000 naturally occurring flavonoids have been reported in nature.

Flavonoid-containing foods are thought to be important to human health in cancer prevention and in providing anti-inflammatory and anti-oxidative effects, to name a few. It is the flavonoids found in honey, tea, wine, chocolate, fruits, and vegetables that are most responsible for these foods' antioxidant characteristics, and thus their healthy image.

Dr. Grimley's research focuses on the flavonoid composition in local honey.



Tending Hives in Stormy Weather

David Tarpy, NCSU, sent out a reminder to beekeepers about how to protect bee hives in windy and wet weather.

- In 50+ mph winds, a brick on top of a hive might not be enough to keep the lid and/or hive together. Consider using a strap or duct tape.
- Keep your hives sturdy and on level ground.
- Stay away from low-lying areas. Flooding can wreak havoc.
- Various local agencies will spray for mosquitoes after a storm leaves standing water. If you want to be notified about spraying, contact NCDA & CS. <u>http:// www.ncagr.gov/plantindustry/plant/apiary/ documents/2015ApiaryRegistrationForm.pdf</u>



This Month in the Bee Yard from Beekeeper Course Manual



- Do your bees have enough food stored for winter? Recommended : 45 pounds per colony. To test, using the back handle of the lowest super, gently try to rock the hive forward. If it doesn't move, your bees probably have enough food. If feeding is needed, transfer honey frames from a hive with an over-abundance, or feed syrup at 1.5 parts sugar to 1 part hot tap water, or 2 parts sugar to 1 part heated water.
- Near end of month, begin preparing for winter:
 - Remove queen excluder
 - Put in entrance reducer
 - Raise hive cover 1/8" for ventilation

Bees in the News

Could a Mushroom Save the Honeybee? Ken Christensen, EarthFix, 8/17/2015, http://earthfix.info/ news/article/could-a-mushroom-save-the-honeybee/ Investigators at Washington State University are working on boosting immune systems of mite-infested honeybees by feeding the bees liquid extracts made from forest fungi. Results are promising. Big Win for Beekeepers as Court Voids Insecticide, New York Times, 9/10/2015, http:// www.nytimes.com/2015/09/11/business/energy-environment/big-win-for-beekeepers-as-court-voidsinsecticide.html?ref=topics "A United States appeals court ruled on Thursday that federal regulators erred in allowing an insecticide developed by Dow AgroSciences onto the market, canceling its approval and giving environmentalists a major victory." Argentine Ants Carry Virus Deadly to Honeybees, New York Times, 9/11/2015, http:// www.nytimes.com/2015/09/15/science/argentine-ants-carry-virus-deadly-to-honeybees.html? ref=topics "The Argentine ant, already known as one of the world's most widespread and damaging pests, may be infecting honeybees with a deadly virus, a new study finds." [deformed wing] Large-scale study correlates neonicotinoid use with honeybee decline, 9/9/2015. The Organic Center, https://www.organic-center.org/hot-science/large-scale-studycorrelates-neonicotinoid-use-with-honeybee-decline/ "A recent study published in Scientific Reports has investigated the link between neonicotinoid use in oil rape fields and pollinator mortality in England and Wales." Thanks to Geoff Leister for keeping an eye on honeybee news!



vey to express your views. <u>https://www.carolinafarmstewards.org/the-buzz-about-north-carolinas-pollinator-protection-plan/</u> Deadline for con-tacting Department of Agriculture with your comments is 10/16.

• Lastly, we tasted the honeys of the season and cast our votes. Ira's honey got the most votes. Congratulations, Ira, and well done, bees!

Blooming in the Piedmont this Month



Goldenrod Crownbeard Groundsel Dog fennel Smartweed White heath aster Tea olive

... and more

Bee Boles

Bee boles are recesses in walls that were historically used to place bee skeps or hives for protection from animals, weather, and thieves.

Hundreds of boles still exist, particularly in northwest Europe. The International Bee Research Association maintains a database of bee boles found in Ireland, England, Wales, and Scotland. The database can be searched by date, location, type of structure, and whether the bole is on public or private land. Most of the entries in the register also have photos.

So, if you're planning a visit to Britain or Ireland – or are just doing some armchair traveling – remember to look for bee boles in the landscape!



Sources: The IBRA Bee Boles Register, <u>http://</u> <u>ibra.beeboles.org.uk/search_choose.php</u> and "Bee Boles at Moycullen," by Plantivaux, Daron, and Walker



Officers for 2015

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