



# "Niagara Rhodo"



*Newsletter of the Niagara Chapter,  
Rhododendron Society of Canada,  
District 12, American Rhododendron Society*

*Newsletter, March 13, 2016*

We are a non-profit organization whose aim is to promote, encourage and support interest in the genus *rhododendron*. Our goal is to encourage gardeners to grow and appreciate these plants, by providing educational meetings with knowledgeable speakers, access to topical publications and hosting joint meetings with other chapters'

<u>Content</u>	<u>Word of Caution</u>
1. Program March 2016 to September 2016	By becoming a successful grower, the reader will be exposed to a contagion for which there is no cure. Once infected with an appreciation of rhododendrons and azaleas most gardeners spend a lifetime collecting these most beautiful of all plants.  <i>H. Edward Reiley</i>
2. Richard Dionne – Montreal Botanical Garden	
3. Richard Dionne Biography	
4. Recap Meeting of February 7, 2016	
5. More on Neonics' & Roundup impact on Honey Bees.	
6. What weather is in store, for rest of spring 2016.	

## Program

**March 13, 2016 --- Sept. 30, 2016**

### Meeting: Dates & Topics:

<b>Sunday,</b>	<b>March 13, 2016</b>	<b>Richard Dionne.</b>
<b>Topic: Hancock Memorial Garden (Éricacetum Leslie-Hancock) at the Montreal Botanical gardens (Les Jardins Botanique de Montreal)</b>		
<b>Sunday,</b>	<b>April, 10, 2016</b>	<b>Annual Meeting &amp; What's in the Plant Sale</b>
<b>Wednesday</b>	<b>April 20, 2016</b>	<b>Deadline to submit pre-orders</b>
<b>Saturday</b>	<b>April, 30, 2016</b>	<b>2016 Annual Plant Sale, Vineland Station:</b>
<b>Saturday</b>	<b>TBA Sept. 2016</b>	<b>Annual Pot Luck Picnic &amp; P4M Sale &amp; Distribution</b>

### Richard Dionne Biography

Richard Dionne has been Horticulturalist-in-Charge of the **Hancock Memorial Garden (Éricacetum Leslie-Hancock)** at the **Montreal Botanical gardens (Les Jardin Botanique de Montreal)** since 1996; In 2002 he was given responsibility for the Shade Garden (**le Jardin d'Ombre (sous-bois)**)

At an early age, while on a family visit to Connecticut, Richard developed an intense love of rhododendrons. This led him to Horticultural studies at McGill University where he earned a degree in Plant Sciences. At **l'Institut de Technologie Agro-Alimentaire de Saint-Hyacinthe** he earned a diploma in Ornamental Horticulture.

Richard Dionne has worked closely with the Toronto Chapter of the ARS to publish with Willem Morsink, *RHODODENDRON HARDINESS ALONG THE NORTHERN EDGE: THE ONTARIO-QUEBEC SITUATION*. *Journal of the American Rhododendron Society*, Vol. 56, No. 4, Fall 2002 .

<http://scholar.lib.vt.edu/ejournals/JARS/v56n4/v56n4-morsink.htm>

Richard Dionne is widely cited in Quebec horticultural circles for his expertise in rhododendron culture, he is an avid horticultural speaker and is a active supporter of La Société de Rhododendron de Quebec. He has shown a strong interest in the Niagara Chapter's Brueckner Hybrid Testing Project.

**Members' Friends, All Gardeners and Friends of the Chapter are welcome at every meeting.**

**Hancock Rhododendron Garden, @ Jardin Botanique de Montreal**

**Sunday, March 13, 2016. 2 P.M., EDT**  
Vineland Research & Innovation Centre  
Vineland Station, Exit QEW north  
(towards the lake) at Victoria Avenue

**Richard Dionne** is curator of the Leslie Hancock Ericacea Collection and of the Shade Garden at the Montreal Botanical Gardens. Founded in 1974 this garden is dedicated to Leslie Hancock (1892-1977). Founder of Woodland Gardens in Mississauga, Hancock is credited with introducing rhododendrons and azaleas to the general public in the Toronto area and later to other parts of Ontario. A great rhododendron enthusiast, he was the driving force behind the creation of this garden in Montreal, which opened in 1976, and drew up the plans for it himself.

The Hancock garden's 1100 taxa are surrounded by conifers providing good winter protection from cold, drying winds and catch the snow, which forms a protective blanket. Oaks and conifers allow filtered sunlight to reach the garden; the fallen leaves form a natural layer of mulch each year and help nourish and acidify the soil as they decompose.



**Richard Dionne**

**Meeting of February 7, 2016:  
Revisiting A Year in the Life of a Beekeeper**

More than 50 people turned out for William Roman's talk on Bees. This alone attests to the amount of interest in this topic held by our members and friends. However, immediately after William started his talk it was clear that the audience was avid in its interest in bees, and started to guide the talk with detailed questions which suggested more than a passing interest in the topic. Early in the talk the focus was on winter survival, social structure in the bee colony, reproduction and the bees' range of activity. The audience, through their questioning, also revealed a strong interest in bee keeping and in techniques to start modest operations.

Half way into the talk, questioning turned to health of bees and stories about their decline. According to William's discussion, the rate of decline of bee populations has been arrested, but serious concerns still exist because of the use herbicides and pesticide coated seed used by farmers growing crops such as corn and soy beans.

Several classes of chemical are important in discussing the bee question: Phosphonoglycines, Neonicotinoids, Carbamates.

Some have recently discussed the herbicide "Roundup" as a Neonicotinoid. Our research shows that "Roundup" is a glyphosate which is a **phosphonoglycine** chemical. The impact of Roundup on bee populations is controversial

One study conducted by USA Agriculture's Agricultural Research Service and Mississippi State University reported that they tested 42 commonly used pesticides in a realistic field setting on cotton row crops. They mimicked a situation where an adult bee in a cotton field accidentally gets sprayed with a pesticide or herbicide.

Using a modified spray tower to simulate field spray conditions, the researchers found that 26 pesticides, including many (but not all) neonicotinoids, organophosphates, and pyrethroids killed nearly all of the bees that came into contact with the test pesticide sprays. However, seven pesticides, including glyphosate and one neonicotinoid (acetamiprid), killed practically no bees in the tests.

The pesticides tested included 40 insecticides and miticides, one herbicide (glyphosate, better known by its trade name "Roundup"), and one fungicide (tetraconazole). What made this study more realistic was not only the field spray application of each pesticide, but also the interpretation of data. The researchers determined the lethal concentration and lethal dose of each pesticide (to determine chemical toxicity), and then matched those numbers with the amounts of pesticide actually used in agriculture. In this way, they could rank pesticides by individual chemical toxicity as well as by how much they are used in the field. Chemicals that were not used as much ranked lower despite toxicity, while chemicals that were used more tended to rank higher.

The majority of row crops in the U.S., such as cotton, soybeans, and corn, are transgenic, which has reduced the harm from chewing insects, but has refocused pesticide applications to target sucking insects. These pests include the tarnished plant bug (*Lygus lineolaris*) and various species of stink bugs. This refocus, together with an increase in resistance to insecticides by some targeted insects, led to more widespread use of leaf sprays of insecticides. That practice, in turn, has boosted the risk of honey bee exposure to these pesticides.

The new data show that a number of pesticides are available, including the neonicotinoid acetamiprid, that could be used to control tarnished plant bugs, stink bugs, aphids, and mites, without causing much (if any) harm to bees. It also calls into question some regulatory measures that focus only on neonicotinoids,

since organophosphates, pyrethroids, and carbamates together comprise the 26 commercial pesticides that pose a significant threat to honey bees. Also significant was the low-toxicity ranking of glyphosate, the world's most-used pesticide, which has been targeted for its use on fields with genetically modified "Roundup-ready" crops that can resist the herbicide.

**Neonicotinoid**, chemically similar to nicotine, products are used on corn and canola crops, the majority of cotton, sorghum, and sugar beets and about half of all soybeans. They have been used on the vast majority of fruit and vegetables, including apples, cherries, peaches, oranges, berries, leafy greens, tomatoes, and potatoes, to cereal grains, rice, nuts, and wine grapes.

In agriculture, seeds are coated with a neonicotinoid product. The usefulness of such seed treatments for pest prevention depends upon the timing of planting and pest arrival.

Most widely used garden insecticides, now banned in Ontario, but still in use in many jurisdictions in the United States are included among the neonicotinoids.

Some research studies have shown that the toxic components of Neonicotinoids are absorbed in the pollen and nectar making the floral components toxic to honeybees that feed on them. The end result is that they lose their ability to eat and have a much harder time learning how to forage properly. Carrying the chemical back to the hive appears to contribute to hive colony collapse.

Pesticides carbaryl carbofuran and methomyl all belonging to the **carbamate** group were studied in the Indian State of Karnataka by a group at Bangalore University, India.

Although there is widespread use of these pesticides in that state, they concluded that the agro and forest ecosystems of Karnataka has not been contaminated with high degree of pesticide residues as indicated by the bees and bee products except with very low concentration in few areas of the state. They do caution that Carbamates have one of the highest acute toxicities to humans among pesticides widely used on agricultural crops due to its activity as a cholinesterase inhibitor and neurotoxicity.

**Final Note:** The product of bees feasting on Luteum pollen results in rhododendron honey found to be toxic to humans. This was found in a study of honey users in the mountains of Turkey. This honey, when consumed regularly, causes irregular heart rhythms which can be fatal.

## Honey Bees in March

One of the pleasures of an early spring day is to see a field of aconites in bloom. Stepping out into the sun one is struck by the aroma of honey and the sight of bees at work. Here is a sample of a view on March 9, 2016 captured by Wanda in our backyard, just outside the rear door.



Photos by Wanda Yarmoshuk

## Helen Curtis In the Raffle on Sunday March 4 Plants to be Raffled.

This is a wonderful hardy white evergreen azalea. A Shammarello Hybrid ('Desiree' X 'Rosebud') it has bloomed in the Yarmoshuk's front yard for more than 20 years. It even survived the last 2 polar vortices. It is now some 3 feet wide, 3 feet tall. Its greatest threat to survival appears to be Nick's watering techniques. It did suffer during 2 summers from poorly directed watering streams.

