



The Rose Hip Newsletter of the *Peninsular Rose Club*

Meetings: 3rd Tuesday of each month (except Dec. & Jan.) 7:30 PM Elk Lake Baptist Church Hall, 5363 Pat Bay Hwy., Victoria. Email: peninsular@quillserv.com Website: <http://nurserysite.com/clubs/peninsular/>

Feb. 15 2005

President's Corner

Welcome back to a new season of healthy gardening. I trust all your roses came through the winter cold spell safely. It is now time to weed those beds. A special thanks to Ilean for acting as secretary for last month's special and Trevor for leading the planning session for this season's programmes. There were a lot of good ideas.

One event we did not know about until recently: Peter Beales is making a tour of Canada starting in the Spring. He will be in Victoria in early July. We are awaiting further information from the Canadian Rose Society but presumably we will sponsor an address by him. He is one of the world's leading Rosarians and authors. It will mean several committees to manage the evening (venue, tickets, reception (?), advertising etc.) I have written C.R.S. to see if they will be helping with the expenses. That is all the information at present.

See you all at the February meeting (third Tuesday). Bring your mug for coffee or tea. Reminder, fees for the 2005 year (\$10) are now due.

Good gardening, *Bernard Rain* (477-5221)

This Month's Meeting

February 15th 7:30 PM at Elk Lake Baptist:
Compost, or how to love your soil: with Trevor Inkpen +
What to do this month

The Peninsular Rose Club Web site:

<http://www.nurserysite.com/clubs/peninsular/> has photos and articles by Club members, pruning and rose care tips, and issues of *The Rose Hip* in PDF form as they are published. Send photos and articles to Trevor at peninsular@quillserv.com or 386-6227 (phone/fax)

To Do in Feb/Mar

- Once the threat of freezing is past, pull mulch off of roses if you mounded them for the winter.
- Any bareroot roses delivered in January should be in the ground by now.
- When the forsythia booms, prune rose bushes to their final shape for new growth. Spray with dormant oil/sulfur if you wish after pruning before new growth begins.
- Clean up any dead leaves or prunings from the ground around the roses and dispose in trash or burn.
- Lay down new mulch on beds if you didn't in the Fall.

- Don't add Nitrogen fertilizer until there is several inches of new growth on the roses.
- Start your anti-fungal spray program in March if you use it.

Upcoming Programme schedule

February Workshop:

Pruning, with Larry and Diana Janse – Small group hands-on workshop at the Janse's near Elk Lake. Phone Larry at 658-5253 to be on his list to call when he schedules the pruning, it is weather dependant so be prepared to attend at short notice.

February 15th meeting at Elk Lake Baptist:

Compost, or how to love your soil with Trevor Inkpen + what to do this month

February 19th Event:

"Seedy Saturday" at the Victoria Conference Centre open to the public 10 - 4 PM Coordination- Diana Janse 658-5253

Early March Workshop:

Pruning and mature rose renovation, at Rene and Ruth D'Hollander's - Date to be announced

March 15th meeting:

What's new in Roses with Cathy Johnson, + what to do this month

April 19th meeting:

Irrigation techniques with special guests, + what to do this month

May 17th meeting:

Container roses and minis, + what to do this month

June 21st meeting:

Garden meeting @ D'Hollander's - rose identification and identifying characteristics. Rene and Ruth have a mature rose garden, a former show garden, that they will be restoring.

July: Date and venue to be determined:

Public presentation by Peter Beales, Author, Nurseryman, Rosarian and President of the Royal National Rose Society

July 19th meeting:

Garden meeting, Tentatively scheduled for the Government House rose garden

August 16th meeting:

Garden meeting, Location TBA

September 20th meeting:

Heritage Roses + what to do this month

October 18th meeting:

Using roses in landscaping + what to do this month

November 15th meeting:

Year end wrap up and social

Research on Sprays and Supplements

A 1996 article on blackspot prevention <http://www.ag.auburn.edu/aaes/communications/highlightsonline/summer96/blackspot.htm> from Auburn University in Alabama (Kira L. Bowen, Bridget K. Behe, and Elizabeth A. Guertal) found that regular (7–10 day) treatment with fungicides was effective in reducing disease by 20%, but resulted in excessive use of chemicals (15 applications per season). At issue was the tendency of rain to wash fungicide off the leaves, rendering it ineffective.

A better programme was alternating sprays of fungicide and sprays of either **horticultural oil** or **oil and bicarbonate** mixture (the Cornell formula is similar but adds some soap). They recommended that oil be used weekly, and that the fungicide spray be substituted whenever there was no rain between treatments. They found that in the heat of Alabama, constant oil application was detrimental to the leaves, so the fungicide gave the foliage a “break” from oil during dry spells. Rain reduced the phytotoxicity of the oil mixture. The fungicide applications were able to be reduced to 8 per season from 15, and the effectiveness of disease prevention was equivalent to the plants on full fungicide.

Baking soda spray alone did not make a significant difference in disease or bloom. Horticultural oil alone made a small decrease in disease and a small increase in bloom. It’s a shame they didn’t try the reputedly more effective formula of potassium bicarbonate instead of (or as well as) sodium bicarbonate.

Hold the Salt

The article also discussed the effect of **Epsom salts** (magnesium sulfate, $MgSO_4$), **gypsum** (calcium sulfate, $CaSO_4$) and **calcium chloride** ($CaCl_2$) on the bloom, vigor and disease incidence of roses (which otherwise got the same N-P-K fertilizer). The plants receiving the supplemental Mg or Cl showed slightly less defoliation due to disease over the course of the season. However, the plants that received Epsom salts and those that received Calcium Chloride had **less vigor and significantly fewer blooms** than the untreated plants. Gypsum application resulted in the same vigor and increased bloom compared to untreated plants.

This is fascinating, but suffers from a lack of both background and follow-up; they did not state the type of soil, the pH or the soil analysis pre-testing, and they did not state the analysis of the soil after the season of testing. (I did receive an email from one of the authors saying that the pH was balanced; 6.0 – 6.5 at the beginning of the test, so they assumed there was adequate Mg and Ca). The bloom count was given as a yearly average only, and not as counts over time through the season.

They added a cup (245 g) of Epsom salts ($MgSO_4$) per month throughout the season, which sounds like way too much – over 2 pounds per rose. University of Massachusetts recommends (if Mg is low and limestone is not added), a single application of 5–10 lbs Epsom salts per 1000 sq. feet — which I work out to 2 – 4 ounces (50 – 100 g) per rose, one time. Here is my guess; if the

soil was initially Mg. deficient, the first application of Epsom salts may have promoted some increased bloom. Then, as the magnesium level in the soil rose through monthly doses, by the end of the season the soil was in a state of soluble salt toxicity.

The Calcium Chloride ($CaCl_2$) at half a cup (133 g) per month showed similar reduction in bloom, perhaps from chlorine ion overabundance, (the author said they didn’t consider chloride toxicity, but assumed that with the heavy rains they get in the summer, that excess salts would have been leached out). Gypsum ($CaSO_4$) at 2/3 cup (167 g) per month was apparently beneficial. As the granular supplements were added dry, I could guess that the delivery rate into the roots was affected by the solubility of the three compounds, with Epsom salts being immediately soluble and gypsum taking much longer to break down and enter the soil

Background

Calcium and Magnesium need to work together in the soil for proper plant metabolism. A lack of either is a problem, but so is an excess. Too much of one can interfere with the other. Without sufficient Mg, the plant cannot use Phosphorus. These minerals are consumed by the plant and become fixed into the leaves and stems, so Ca and Mg ions need to be available in the soil throughout the growing season at rates of 300 – 1000 ppm (parts per million). However they are not fertilizers to be added monthly, they are minerals that need to be added periodically only as the soil requires - and what it will require will vary in each region and each garden. To be sure what you need, you should periodically have your soil tested by a lab. They will recommend the application rates of each nutrient and mineral to bring your nutrients into balance. If you want to add Epsom for its rumored ability to promote basal breaks, do so once, not continuously.

Our complete organic fertilizer recipe includes dolomitic limestone, which contains both calcium and magnesium in roughly a 2:1 ratio. Short of regular soil testing, dolomitic limestone is the safest way to ensure that the soil has adequate Ca and Mg because it is Ca:Mg balanced, and the limestone is not soluble; rather it slowly breaks down under biological activity in soil, so it neither washes away nor overdoses. Although limestone raises soil pH, it’s usually not a problem in our naturally-acid soils.

Gypsum does not affect soil pH and contributes both Ca and S (sulfur). Sulfur is not normally deficient in a soil with good organic content but can be in sandy soil and where chemical fertilizers have been overused. Superphosphate fertilizer (0-20-0) contains about 20% Ca, and bonemeal also contains Ca. We have not considered gypsum in our own fertilizing plan, mainly because it is relatively expensive. However, my brother-in-law (the giant pumpkin grower) swears by regular application of gypsum when preparing beds. You want to talk to people who take soil analysis seriously, just hook up with someone who considers a 500 lb Jack’o’lantern to be “a good start”.

Nutrient Delivery Ability

Minerals and nutrients in the soil do no good as long as they are bound together in molecules. To be available to the roots, they

have to be broken into their component ions and dissolved in water. The following is excerpted from the University of Massachusetts:

“Cation exchange capacity (CEC) is an important measure of the soil’s ability to retain and supply nutrients. The bulk of this capacity resides in finely divided soil organic matter. A smaller contribution comes from the soil’s clay particles. The basic nutrient cations (positively charged ions) of Calcium (Ca^{++}), Magnesium (Mg^{++}), and Potassium (K^+), and the acidic cations of Aluminum and Hydrogen account for nearly all the adsorbed cations in the soil. Very sandy soils and weathered clay soils low in organic matter commonly have CECs less than 5. Soils with very high CECs (> 40) are invariably rich in organic matter. A CEC between 10 and 15 is typical and usually adequate.

CEC is important because it represents the primary soil reservoir or readily available Potassium, Calcium, and Magnesium and several micronutrients. It also helps to prevent their leaching. The ease with which a plant gains access to these nutrients depends somewhat on the relative percentages of the adsorbed cations. For this reason it is suggested that the percentage saturation levels be held within loosely defined ranges. For example, a soil with base saturations of Calcium 70%, Magnesium 12%, and Potassium 4% would be considered balanced for most crops and has a soil pH of about 6.5.”

Excessive acidity or alkalinity of the soil will interfere with cation availability, as will over-application of ammonium or aluminum nitrate chemical fertilizers.

The key to making nutrients continually available to roses is to have a lot of organic matter incorporated into the soil (compost, manure, decomposed bark and leaf mulch, grass clippings, fish/wood compost, alfalfa and seed meals), and to have a good amount of mineral nutrients consistently available, which can be ensured with rock phosphate (K), greensand and kelp meal (P), and dolomitic limestone (Ca and Mg). Although sulfur (S) is needed in quantities similar to Phosphorus, sulfur is a product of organic decomposition and is contributed by acidic rain.

More on ions and plant growth at <http://www.mainerosesociety.com/articles/healthy2.html>

Correspondence

1) I’m writing because I thought the visitors to your site might benefit from a link to my informational site about the basics of growing roses organically. The address is <http://www.organicrosegardening.com>

I have worked very hard to make it an easy-to-understand, comprehensive resource about roses, their history, and how to grow and care for them without using harmful chemicals, for people who are just starting out or who have more advanced questions. Sincerely, Kent Swanson

2) Gabriola Home & Garden Tour 2005
June 26, 2005 10:00 am to 5:00 pm

A unique experience to visit some of the islands homes & beautiful coastal gardens is offered in this self guided tour, which offers you an unforgettable taste of island life including local musicians & artisans at featured sites. All proceeds from this fundraiser is donated to People for a Healthy Community which benefits various programs in the community including the Emergency Food Depot. Tickets are \$20.00.

Website: <http://gabriolatour.islandbrowser.com>
For additional information or to reserve your tickets call (250) 247-9935 Email: lynch@discovergabriola.com

3) I am new to Victoria. I notice you took a beautiful photo of Bewitched a few years ago. Do you know where it might be available in Canada? Also, I haven’t found a source for Mutabilis, but loved it in California.

Thanks, Jane Stivers jane.stivers@shaw.ca

Canadian Rose Society Newsletter:

The Comm-Poster, newsletter of the Canadian Rose Society, is available by email as an Adobe Acrobat .pdf file. Send a request to graber@sympatico.ca



Blush Noisette blooming in Ilean & Trevor’s garden,
Christmas Eve 2004

