



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/>

June 15 2004

Message from the President:

This month we are having our first tour of the wonderful gardens at Royal Roads. See the details in this newsletter, this is a great opportunity for us, don't miss it!

This is the month for doing some garden renovation - I have painted a fence and removed a large shrub that had a canker of some kind on the trunk at the soil line.

The roses have demanded their usual June care - heavy deadheading, plus watering, fertilizing (and the tomatoes as well) and stripping diseased leaves. Some of the roses were so early that we are taking hips off already right beside new buds. Try to get all of the dropped rose leaves and petals picked up.

So far it's been pretty good for disease in my garden. A bit of mildew, but that's my own fault for letting the roses dry out. It is deceptive - it may look like the garden is getting watered with a rain shower, but really no water penetrated the soil. The first hour or so of light rain is really wasted to evaporation and foliage, before any starts soaking in. Get out and dig into the soil to see how dry it is an inch down, you may still need to water after a rain.

Our city fathers are determined to scare us into not watering, so I recommend using a smart watering system like drip or soaker hoses to make the most of the water we use. I have also put in a combination mulch of chips and composted material in the front and back. I am very happy with the way it keeps down the weeds and conserves the moisture in the soil.

See you at the meeting,

Happy Growing, Orma.

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)

The Rose Hip newsletter goes via Internet to all members with email. To receive the Rose Hip by postal mail, please provide 10 self-addressed, stamped envelopes.

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

This Month's Meeting: June 15 at 6:30 PM

Garden meeting at Royal Roads University

A guided tour of the Rose Garden at Royal Roads University. This is a rare chance to tour the gardens with a RRU gardener who can answer questions.

Royal Roads University is on Sooke Rd in Colwood, about 2 miles past Juan De Fuca Rec centre. Turn left into the University entrance and follow the main drive all the way to the bottom of the hill. Park in the lower parking lot by the fields (free). **Note the earlier time!** We will meet at the lower parking lot at 6:30 PM. A ride up the hill to the garden is available if needed.

There will be some uphill walking during this tour, so bring some comfortable walking shoes. Remember to bring a snack and a drink of your own to RRU this month as there will be no coffee service.

If anybody has problems getting to RRU, please call Diana or Larry at 658-5253 to arrange ride sharing.

Sunday July 13 Garden tour:

The Elliott's garden at 3125 Qu'Appelle (off Burnside) will be open 1:00 'til 4:00 PM for the Horticultural Society tour. David and Crenagh specialize in Old Garden Roses and species roses. Peninsular members are welcome.

Last Month: Hands-on workshop on preparing roses for display or exhibition. Joan Dobell led a demonstration of grooming cut roses for use in displays. Garry demonstrated his technique for rose fertilization along with watering, using a Miracle-Gro hose-end venturi fertilizer.

Next Month: Tuesday 20th, July arrive 7:00 - 7:30 PM

Garden Meeting at Garry & Evelyn Brust's 6241 Central Saanich Road. Demonstration of drip watering systems. Bring your blooms to a Show and Share.

August 17th Meeting:

Garden meeting at Patrick White's - see the Whites' garden renovation project after the first year.

View Royal Garden Club Rose Show, June 19th:

12:30 to 3:00 PM, judged rose show, \$4 admission includes tea and strawberries, All Saints Church, Stewart Rd. off Old Island Hwy. This small club always put on a fabulous show of roses.

Gordon Head Lily Club "Summer Scentsations" June 26th:

10 AM to 3:30 PM at the Cadboro Bay United Church Hall, 2655 Arbutus Rd. Judged and Non-Judged exhibits, Plant sales, Entertainment, Refreshments

What to do this month: June

- Water and fertilize. Consider using a soluble fertilizer with your watering.
- Strip any diseased foliage
- Continue your spray programme if you use anti-fungal sprays.
- Cultivate the soil around your roses to remove weeds and work in organic fertilizers (keep it shallow, so you don't damage roots).
- Lay down a mulch between roses if you wish.
- If you are showing your roses, continue to pinch out extra buds as they start to develop, leaving only one main bloom to develop as an exhibition rose.
- Deadhead as the rose blooms die, cutting to the first outside facing five-leaf leaflet.

The No-Clog sprayer approach to fertilizing - by Garry Brust

It's late spring in Victoria - stop and think a minute about what happens to granular fertilizer when you spread it around your roses. How long did you spend watering it in? If you answered 15 seconds, you're more conscientious than most. The tendency is to think to oneself "the next time it rains, it'll get watered in." Guess what - we're not likely to see appreciable rainfall until October, so your fertilizer for summer growth won't be delivered to the roots of your roses until Fall, when you want to start hardening them off for Winter.

Here's my contention: applying dry fertilizer is a waste!

Would you rather deliver fertilizer to the roses' roots when it's needed, and with little or no extra work? My secret to effective fertilizing is to use a hose-end "No-Clog" fertilizer sprayer, such as sold by Miracle-Gro and Plant Prod and water directly into the root zone.

Let's get one thing out of the way - the first job is to build a good soil with organic material (compost and manure). We'll presume you have done that. But roses are heavy feeders and compost alone doesn't provide enough for vigorous growth, so most rose growers add supplemental fertilizer in the growing season. A poll of our club showed the following types used:

- 28% members use organic liquid and dry
- 40% use granular
- 32% use soluble Miracle-Gro or Phostrogen

The "No-Clog" sprayer consists of a plastic jar, with a lid that has both a male and a female garden hose fitting. Inside the lid are two small holes that allow a portion of the water stream to "jet" down into the jar, and return, with fertilizer, into the water stream coming out the male fitting. You can use the supplied sprinkler attachment on the jar for hand watering, or you can unscrew the sprinkler head and screw a hose onto the output, for connection to a drip, soaker hose or other watering system.

What you do

The plan is to add dry fertilizer to the jar, hook up the hose, and water your roses. As you water, the fertilizer will be dissolved and delivered to the roots.

Two methods:

1) Spray application: You can set the jar with the sprayer beside the rose, and leave it there for one minute while you deadhead and check for disease. Then move it to the next rose. Once you have done 8 roses, come back down the row, this time setting the sprayer on the other side of the rose. This way, each rose gets 2 minutes of watering (approx. 20 liters depending on your water pressure), and the dilution of the fertilizer will equalize out per rose.

2) Drip application: This one's even easier - just hook the jar up to a drip or soaker hose watering system and let it run for 4 - 5 hours. The fertilizer will be delivered to each plant equally along with the water. When the water is shut off, a sudden release of water at the back of the sprayer is normal as the sprayer is designed to release internal water pressure when not in use. It may be useful to put a pressure regulator in the line before the sprayer, to limit the back pressure.

Here are the advantages:

1. The sprayer saves money because no fertilizer is wasted, all nutrients are in a soluble state when applied and can be immediately used by the rose.
2. It saves time because once the sprayer is loaded one has to make only one trip through the garden.
3. If used in a drip system, all plants relying on drip will get some nutrients.
4. When delivered as a solution, there is little or no chance that the fertilizer will "burn" roots, because burning is caused by dry fertilizer drawing moisture out of the roots.

The siphon rate out of the container appears to be about 15:1 at my home water pressure. That means that most of the jar's contents will have been dispersed in 15 minutes

I use the sprayer at the following rates which are based on the rates recommended by the manufactures

- Granular or beads (20-20-20, don't use Osmocote or other time-release formulas) - fill the jar with about 4 cups for eight average size rose plants
- Miracle-Gro 20-20-20 or 10-30-10 for eight plants - 8 tablespoons
- Phostrogen 10-10-27 for eight plants - 8 teaspoons

Testing with a Drip System:

During the past two days I have tried to determine how long and how much water is required to dissolve 4 cups of beaded fertilizer in the sprayer. Here are the results:

1. The sprayer was hooked up to the front yard drip system for five hours during the last two days
2. About one quarter of the original volume of beads remains and after allowing the remainder to soak for a few hours, my meter indicates there is still considerable fertilizer salts remaining
3. I do meter the volume of water delivered to each drip system so I have determined that 120 liters of water has agitated the beads during the five hours of watering. (The agitation of beads can be observed through the translucent container and it appears to be about what one should expect from a blender on low speed)
4. Conclusion: soaking the beads before use in sprayer should speed up the dispersal of nutrients in watering system. In addition, considerable amounts of water and time are required to dissolve beads.

It is unlikely the anyone using the conventional method of throwing beads around plants is watering in four cups of beaded fertilizer with more than 120 liters of water. Therefore, throwing fertilizer on the ground appears to be wasteful and inefficient.

Potash (K) and Phosphate (P)

Our soils on the West coast are frequently deficient in potash and phosphate. I use about 1 kg of sulphate of potash per year for the potted vegetables. Prior to this year I frequently had potash and phosphorous deficiency symptoms. Last fall I learned that many commercial growers add 3 grams of potash and 3 grams of phosphorus (1 gram triple superphosphate) to each liter of potting soil. I tried that this year and to date my previous problems have not occurred. My research last winter seems to indicate that weak acids in a growing media assist in the dissolving of granular fertilizer.

Salt and Soil:

One thing I have talked about before is salt levels. We want to avoid building up the level of salts in the soil, and particularly in pots and containers, where salts can accumulate. Fertilizer contains soluble salts, and there is a range of concentrations that plants do well in. Too much of a good thing however, can damage the plants. Manure tea and granular are highest in salts, Phostrogen is the lowest.

High-nutrient fertilizers like 20-20-20 have more salt, but because you apply half as much as a 10-10-10 for the same fertilizer value, the salt increase in the soil is less. You can purchase a meter that measures the salt content of soil, and keep records of what meter readings correspond to the best performance of your plants. Here is an article on the subject from North Carolina State University:

HIGH SOIL SALTS INJURY

Jack E. Bailey, Extension Plant Pathologist
Charles W. Averre, Extension Plant Pathologist
J. Paul Lilly, Extension Soil Scientist
<http://www.turffiles.ncsu.edu/pubs/pathol/salts.html>

Actively growing annual crops require a continuous supply of balanced nutrients in the soil. These are usually provided by the application of fertilizers which include soluble salts. However, if the concentration of any soluble salt in the soil, including those from fertilizers, becomes too high, the roots and later the plant tops are injured. The majority of soluble salt problems originate from the improper use of fertilizers; in a few cases by using water high in salts.

Symptoms of "salt" or "fertilizer" injury may be variable, but usually include: slow and spotty seed germination, sudden wilting, stunted growth, marginal burn on leaves (especially lower, older leaves), leaf yellowing, leaf fall, dead roots, restricted root development, and sudden or gradual death of plants. While the major effect of high soil salts are to the roots, the tops of plants may show "salt injury" while the roots are apparently unaffected. In this case, the soluble salts enter the roots and are moved through the plant vessels to the leaves where the water evaporates and gradually concentrates the salts to toxic levels. When soil soluble salts are excessively high, the roots are unable to absorb water and the plant wilts. The problem is apt to be more pronounced after fertilizing, or during excessively dry conditions. Allowing the soil to become too dry for even a few hours can result in "salt injury".

Plants may recover from "salt injury" provided the high salt level in the soil is reduced. This may occur naturally after a rain, or be alleviated by irrigation. Some plants are more prone to salt injury than others. Examples of easily damaged plants are, peanut, soybean, corn, alfalfa, clovers, timothy and vetch.

HOW TO AVOID HIGH SALT INJURY:

1. Have soil tested prior to planting and fertilize according to the rec-



May Meeting: Berolina, Secret and Ingrid Bergman waiting for their chance to be prepped for display

ommendations, including placement.

2. Use the correct amount of fertilizer of the proper analysis. If the recommendation calls for 200 lb of an 8-8-8, do not get mixed up and use 200 lb of 12-12-12 or 20-20-20 or a 0-0-60. High analysis fertilizers have less salt problems per unit of plant food than low analysis fertilizers. The salt index of sodium nitrate is 100 while the salt index of ammonium nitrate is 104. However, because ammonium nitrate contains more than twice as much nitrogen as sodium nitrate, the salt index per unit of plant food is hal as much (sodium contributes to salt index, but is not a plant nutrient). Try to avoid the use of high-salt fertilizers such as "soda" (sodium nitrate).

3. Place the fertilizer correctly. There is less danger of salt injury when fertilizers are broadcast and then disked-in. (*Note: And less still if delivered dissolved in water*) Banded fertilizer applications require care. Do not seed or plant on top of the banded fertilizer or closer than 4 inches to it. "Sidedress" the plants so that the fertilizer is dispersed over the root zone-not concentrated close to the stem, or concentrated in a narrow band over the roots.

HOW TO TREAT A HIGH SOIL SOLUBLE SALTS PROBLEM:

1. The excess "soil salts" must be leached (washed) from the root zone. This can be done by overhead irrigation with three to four inches of water. For slight "salt" problems, maintain good, uniform soil moisture and avoid drought conditions by irrigation to supplement rainfall; this will gradually eliminate the problem as plants assimilate nutrient portions of the salts.

2. In some cases, banded fertilizers can be dispersed by shallow cultivation.

