The Victoria Rhododendron Society
Newsletter

Box 5562 Postal Station B, Victoria BC Canada V8R 6S4

May 2011   Thirty-First Year of Publication

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MEETING
MONDAY, May 9, 2011 at 6:30 pm
Rhonda Rose will give us a guided tour of the
Finnerty Gardens at the University of Victoria
Meet in front of the Chapel (parking is free after 6 pm)
Meeting, dessert and coffee after
In the MacLaurin Building

NOTE CHANGE OF TIME, DATE AND LOCATION

NOT May 2 at Garth Homer (being used as a Polling Station for the Federal Election) BUT May 9 at the Finnerty Gardens at the University of Victoria.

REFRESHMENTS

Bring your favorite dessert to the meeting after the tour of the gardens. Pictures from the Show will be shown.

Please let Betty Gordon know at 250-479-0210 if you are coming.

A Review of Don Martin's April talk on Magnolias.

by Theresa McMillan

Don introduced his talk with a picture of the deep red toned magnolia bloom, "Spectrum". It is one of the latest hybrids. He gave us a brief history of this very old plant, which forms large and long-lived blooming trees that have been used in gardens for many years.

M. "Spectrum"

(Continued from page 1)

Don showed us a fine variety of magnolia flowers in various shades, white, pink, mauve, yellow and red. Some flowers were huge, larger than a human hand; some are only 2" wide. Some blooms like wesnerii have a sweet smell; one other smells like a wet goat and unfortunately, slugs like wesneriis.
Some of the recommended magnolias he found did not do well in his garden; they were too tender, or the colours were not right due to early frosts or unfavorable soils. New Zealand hybrids in particular did not work out well for

him. The plants are used to volcanic soils and a milder climate than found in southern British Columbia.

Don admitted some magnolias like Yellow Bird are not good "doers" for him; after trying three

M. 'Golden Gift'

times to grow a certain magnolia and have it die, he said either you are a fool, or you really, really like that plant.

At the end of the talk, there were pictures of several magnolias that were Don's special favorites and did grow well in his garden. Some that he was positive about are Koban Dori, Golden Gift (small and good) and Spectrum, a pink.

To our surprise, Don mentioned that Magnolia Stellata can be grown in boggy areas, and, a bonus, it stays relatively small. When planting magnolias, fall is best. Wait until the fall rains start. Magnolias need some protection during the first winters but will be fine once they are established.

M. 'Koban Dori'

PICTURES, PICTURES, PICTURES…….
from Peter Barriscale, Vice President

We want several pictures of rhododendrons and gardens to brighten up our November meeting, so remember to take lots of pictures of flowers and gardens this spring, summer and fall!

Oddthoughts 13.
Can Plants Count?
Part 1: Fibonacci

By M. .J. Harvey

I want you to get hold of a pine cone either now, or at some time in the future. It will be most convenient to have it in the damp, compact state rather than dried out and fully expanded.

With a felt-tipped marker mark the end of one of the scales, any one, with a dot of colour. Now look at the cone and you will see that the scales are arranged in helices (spirals are flat, in one plane like a clock spring, helices are in three dimensions). So continue to put dabs of ink on all the scales in the same helix. There are several helices so count how many there are going round the circumference of the cone starting with the one you marked and ending with the one just before it. Write down this number.

Look again at the cone and notice, if you haven't already, that there is another series of helices going in the opposite direction but with a different pitch. With a differently coloured marker put dots on the scales of one of these counter-rotating helices and count how many of these there are around the cone.

Write down this second number.

What you will find is that these two numbers are successive items on Fibonacci's series. The simplified version goes:
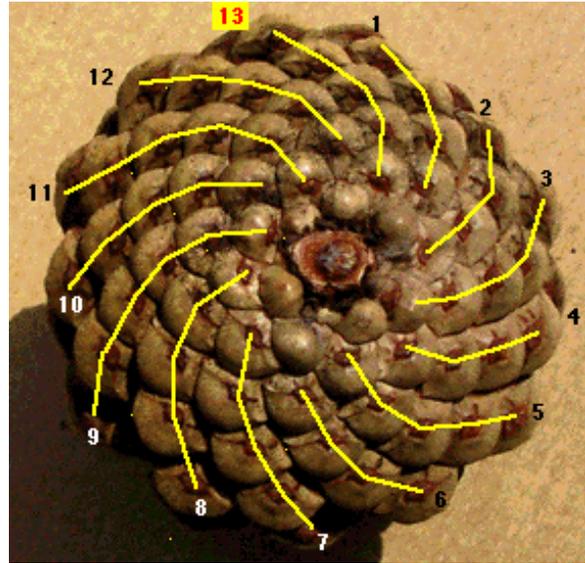
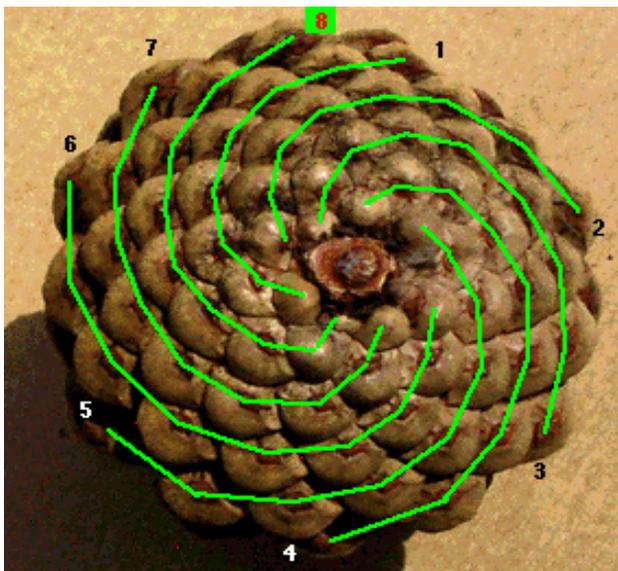**Pinecone Spiral Clockwise (13)**

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55...

continuing indefinitely, each successive number the sum of the previous two.

(Editor's note: Look at the above list of numbers. Notice, 0+1=1, 1+2=3, 3+5=8, 5+8=13…)

Slender cones such as the white pines and Douglas fir usually have low ratios of helices as 3/5, while Scots pine is 5/8 and a giant cone of unknown determination I picked up in Oak Bay is 8/13.

In my earlier days I did a couple of paintings based on Fibonacci's series. One is of an unopened head of the woolly-headed thistle, *Cirsium eriophorum*, showing helices with a 13/21 ratio. The other is of Jack-go-to-bed-at-noon, *Tragopogon*, with bracts and florets also in a Fibonacci ratio. The interesting thing about Jack-go-to-bed-at-noon is that there are two very similar species with yellow, dandelion-like flowers, *T.*

Pinecone Spiral Counterclockwise (8)

pratensis and *T. dubius* (both introduced herbs from Europe). They are hard to tell apart except that the involucral bract and florets have a different Fibonacci ratio in each, thus making identification easy.

If you have the opportunity in the summer, examine the flower of a passion flower, *Passiflora.* In *P. caerulea*, a commonly cultivated species, you will see 3 stigmas, 5 stamens and a ruff of possibly 89 very thin petals. At the higher numbers the precision tends to fade.

Woolley-headed Thistle

There are also 10 protective sepals - is this 2 rows of 5?

Passiflora

In the flowering plants in general, the major division into the narrow-leaved Monocotyledons and the usually broader-leaved, net veined Dicotyledons is based on the earlier numbers in Fibonacci's series: Monocots with one seed leaf (cotyledon) inside the seed, and Dicots with two.

In the Monocots lily flowers show a tri-lobed stigma and ovary with three cavities, six stamens and six tepals. The sixes are interpreted as two upper and three lower, thus keeping within the Fibonacci series.

In the Dicots, Asteraceae, the dandelion family, tends to be very numerate since not only do the tiny unit flowers which combined make up a head have one seed, two stigmas, five stamens and five petal, but the arrangement of these florets in the head (capitulum) also displays the series. The granddaddy of them all is the sunflower. If you can get hold of one, best a really big one, in the fall you can spend a happy quarter hour marking the spirals on the flat heard. This is most easily done when the unit flowers have been cleaned off leaving only the seeds exposed. You may reach 55 spirals. This is great fun, introduce your children to the mathematics of series. There is a journal devoted to the Fibonacci series.

Sunflower

Some plants just don't know the rules. Among the dunces are the Brassicaceae, the cabbage family (also called Crucifers since the petals form a cross). Their flowers have 4 sepals, 4 petals and six stamens. Gentianaceae, gentians; Papaveraceae, poppies; and Onagraceae, evening primroses and fireweed also have four petals but differ in the numbers of the other parts of their flowers. I

Occasionally plants with unusual numbers of parts get named for the fact. The Chinese shrub *Heptacodium has* its late summer flowers in clusters of seven (Greek hepta – seven). The Chinese name translates 'five brothers, two sisters' (or the reverse) because two central flowers are surrounded by

the remaining five. Image 11

In the Rhododendrons most species have five petal-lobes on the bell-shaped corolla, but a very few species have seven lobes. This is consistent for a given species. There is a classification problem in Subsection Pontica of the Japanese Rhodos which has bugged me for years and in which I strongly disagree with the standard published account. Bear with me.

On the islands of Japan there is a Rhododendron which consistently bears seven-lobed flowers. Initially it was called R. metternichii, in honour of the historically famous diplomat Prince Metternich. This name was later declared a *nomen illegitimum*, an illegitimate name because it had not been properly described. (Don't you just love the quaint phrases the taxonomists come up with in their trade?) I mention *metternichii* only because some of us older Rhodo growers have it engraved on that layer of gray matter which never seems to deteriorate even though we can't remember what we had for breakfast.

Anyway the International Code of Botanical Nomenclature states that the correct name of a species should be the oldest validly published name which in this case happens to be *R. degronianum* of 1869. M. Degron happened to be a French diplomat in Japan at the time.

Also on the islands of Japan is a widely distributed, very variable group occupying habitats from shady woodland to exposed mountains - all with five-lobed corollas. These plants may have small leaves or large leaves, short compact internodes or long stretched out internodes and the leaves can have anything from a scarcely visible smear of indumentum to a dense layer of hairs resembling chamois leather. Many of these make wonderful garden specimens including the much-prized *yakushimanum* from Mount Yaku.

The currently accepted treatment of the many forms of *degronianum* is to divide them into a mishmash of subspecies and varieties, vari-

ously with 5 or 7-lobed flowers.

R. Degronianum

My solution is to examine the problem from an evolutionary standpoint. My starting point is the feeling that plants can count a lot better than we give them credit for. In other words the 5-lobed versus 7-lobed split is not a minor wobble in the development of a flower but represents something fundamental in their genetic code. So I would separate out two groups, maybe call them species, on the basis of the 5-7 split. Then go from there.

On the other hand all the horticulturally important characteristics - compact versus leggy, densely indumented versus almost glabrous and large versus small leaves - these are all minor plastic features which are highly selected by the local environment. All these could have been developed during the glacial and post-glacial period. Japan was not glaciated but underwent climatic oscillations. In other words I regard

R. yakushimanum

the much loved *yakushimanum* as a minor subcategory in the 5-lobed species selected in situ by the wind and UV exposure on Yakushima. Similarly others adapted to shade and lack of wind.

Taxonomy on this level is a matter of opinion based on the most reasonable analysis of the data. At this point we need more data and I hope that some Japanese scientist will investigate the subject further maybe using some of the DNA techniques that are now available to detect the 5-lobe and 7-lobe genes. Rant over.

To get back to the beginning - who was Fibonacci? Fibonacci was born Leonardo of Pisa and, because he worked faithfully for his father, became known as the 'good son', or 'Filius Bonus', or Fibonacci in early 13th century Italian. Part of his youth was spent in Morocco where his father was a dragoman (bargainer/translator) for Pisan merchants. Travelling round the Mediterranean he learnt Arabic, adopted the Western Arabic 'Gobar' numerals from Spain (now called Arabic numerals) and used them in place of the Roman system. He also studied the Hindu and Arabic concepts of 'arithmetic' and 'algebra' and by introducing double-entry book-keeping, became in effect the patron saint of accountants.
18.3.11

Leonardo of Pisa

COMING EVENTS

Date	Event	Place
Saturday, April 23	Fraser South Rhododendron Society, Annual Plant Sale	Langley United Church 5673 – 200th St., Langley, BC
Saturday, April 23	Plant Sale and Garden Open	Evelyn Weesjes, 10629 Derrick Rd, Saanich, BC
Saturday, April 30	Victoria Rhododendron Society Show	Hillside Mall, 1644 Hillside Ave., Victoria, BC
Saturday April 30, Sunday May 1	Glendale Gardens Plant Sale	505 Quayle Road, Saanich, BC
Sunday May 1	Uvic Plant Sale	University of Victoria, McKinnon Gym, Victoria, BC
Saturday, May 7	Victoria Rhododendron Society Sale	Abkhazi Gardens, 1964 Fairfield Rd., Victoria, BC
Sunday, May 8	Plant Sale and Garden Open	Carmen Varcoe & Friends, 545- Old West Saanich Rd., Saanich, BC
Wednesday, May 11 – Sunday, May 15	65th Annual ARS Spring Convention	Heathman Lodge, Vancouver, Washington, USA
Sunday, May 22	Plant-A-Holics Sale	Abkhazi Gardens, 1964 Fairfield Rd., Victoria, BC
Sunday, May 29 – June 3	American Iris Society 2011 National Convention	Fairmont Empress Hotel, Victoria, BC
Wednesday, June 1-3	Art of Irises Gardens & Nature	Fairmont Empress Hotel, Victoria, BC
Wednesday, June 1	Simulated Flower Show	Fairmont Empress Hotel, (Palm Court) Victoria, BC
Sunday, June 26	VRS Picnic	TBA

NOTICE FROM THE BOARD:

The Speaker Committee of Norma Senn and Bill McMillan would appreciate having someone to help them line up speakers for our next season of meetings, fall 2011 to spring 2012 . With a three person committee, the task is not onerous.

Please contact Norma by phone at 250-595-7276 or E-mail at normasgarden@telus.net