



January - February 2011



THE CAPITAL ROSE

A publication of the Arlington Rose Foundation
and the Potomac Rose Society.
Affiliated with the American Rose Society.

February Events

Sunday, February 13, 2011, 2:00 p.m.
Arlington Rose Foundation
Monthly Public Meeting
The World of Old Garden Roses
Merrifield Garden Center
12101 Lee Highway, Fairfax, VA
Speaker: Connie Hilker, Owner,
Hartwood Roses

Hartwood Roses has an eclectic collection of 800 varieties of historic and rare roses, including popular classics, old garden roses and rare “found” roses. Connie is an expert in Old Garden Roses and will provide an overview of the most popular classes of OGRs, their characteristics and her favorites in each class.

Thursday, February 17, 2011, 7:30 p.m
Potomac Rose Society
Monthly Public Meeting
The White Menace:
Rosa Multiflora and
Rose Rosette Disease

Slide show created by Mary Peterson,
MCR & member, ARS Program
Services Committee
Presented by Joe Covey
McLean Governmental Center,
1437 Balls Hill Road, McLean, VA

Rose rosette disease has become increasingly prevalent in our area and is almost always fatal to infected plants. This program will explain how this menace came to be, show how to identify infected roses, and offer perspectives for the future.

SUPERthrive: A Vitamin and Growth Stimulant for Roses That Works

by Michael Berger, PRS Master Consulting Rosarian

We all know that the human body needs vitamins and hormones for many different reasons. Roses are no different but we usually think that by providing them with fertilizers containing nitrogen, potash, potassium, and some minerals, are all that they really need to prosper in the garden. However, for the past several years, I have believed that adding the plant hormone Triacantanol significantly improved the growth and disease resistance of my roses. I used to buy Triacantanol in liquid form that came in a small bottle. A few years ago, I was no longer able to find this product on our rose supply market. However, at that time we learned that Alfalfa Tea contained Triacantanol and that it significantly helped the growth of our roses. The only problem is that for those of us who have a very small garden area or grow roses in pots on our apartment balconies, the making of Alfalfa Tea was a non-starter.

Thanks to ARF President Dave Maxwell, who is an expert on fertilizers, I learned that Triacantanol is the primary ingredient in SUPERthrive, a liquid product sold in bottles of various sizes at moderate prices at several of our local nurseries and garden centers. I had been using it for years without knowing all the ingredients of the product. The label on the bottle mentions that it contains “vitamins and hormones” but also notes that the product is not a fertilizer, should not be used in place of fertilizers, but as an addition to their normal use. According to the label, SUPERthrive has been on the market since 1940! The product’s web site does mention that SUPERthrive contains vitamin B-1 and 1-Naphthyl Acid, a plant growth regulator.

Besides helping my roses to produce new basal canes and regular canes very quickly, it also seems to aid in the production of new foliage with excellent substance that tolerates the summer heat. I also believe that it significantly increases the

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Membership

1 year \$15
2 years \$26
3 years \$33

The term of membership begins on January 1st; dues for new members who join between June 1st and December 31st will carry them through the following year, at no extra charge. Payment should be sent to:

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The Capital Rose

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**WELCOME NEW
MEMBERS!**

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Judy Antico Falls Church, VA
Christopher Bach Springfield, VA

PHOTO CREDITS

Page 1 **China Doll** Darwin Klassy
Page 7 **SUPERthrive** www.superthrive.com

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Annual Membership Dues:

Regular \$15 per year
Sponsor \$25 per year
Patron \$50 per year
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Membership is also encouraged in the **American Rose Society (ARS)**, dues for which are \$49 per year (\$46 for those 65 and older). To join ARS, send dues to: **American Rose Society, P.O. Box 30,000, Shreveport, LA 71130** (or see ars.org)

PRS President's Message

Joe Covey

As we begin a new year, it is a natural time to reflect on the status of our organization and consider what the future may hold. At the end of 2010, the Potomac Rose Society had a total of 128 memberships (e.g., individuals or households). The renewal rate has been around 80% for a number of years (which is good), but we are still on a downward trajectory. At the end of 1998, PRS had 402 members. The unfortunate fact is that many hobby and recreational organizations have been losing members for quite a while now. Several rose societies in the Colonial District have given up and gone out of business in recent years. What can we do to keep PRS from suffering the same fate? Ironically, our financial health is not an issue. Our predecessors worked hard on fundraising and invested wisely, so that today, PRS is blessed with handsome nest egg in the bank. Our biggest challenge is to attract new members and begin to grow again; a second challenge is to get more of our existing members involved in Society activities and leadership positions. I believe we need to be more proactive in getting the word out to rose growers around the area about our existence and our activities. Maybe some focused ads (*Washington Gardener* magazine comes to mind) would help, but the most fertile ground is to get out into the nurseries and garden festivals in the spring and spread the word person to person. However, it has been hard to do that with the small active core we have today. So I encourage everyone reading this to (1) join PRS if you are not already a member or renew for 2011 if you haven't already (see box below); (2) come to meetings - we'd like to meet you! (3) tell your rose-growing friends and neighbors about PRS; (4) consider participating in some outreach events and/or serving as an officer or director of the Society (starting in 2012). Please let me know if you are willing to volunteer. We can then begin to make more concrete plans as 2011 moves forward.

Over the last several years, we have seen the loss of three longtime PRS stalwarts: Mel Albert, Bob Alde, Bob Berrien, and Ron Camp. All of these individuals gave many years of service to PRS, mostly in the 1980s and 1990s. Their contributions and accomplishments are far too numerous to mention here. But for me, growing up with my parents' Potomac Rose Society and then assuming an active leadership role myself around 1979, they were respected "elders," colleagues, and friends. Of course many others contributed over the years and continue to do so. But the loss of Mel, the two Bobs, and Ron in such a short span of time makes the passing of a generation hit home for me. It is up to us to carry on in their spirit and ensure that the Potomac Rose Society is around for future generations.

On a lighter note, I hope everyone will peruse this issue of *The Capital Rose* on a cold winter's night and find useful new information within. Mike Berger describes his experiences with SUPERthrive, a hormone-containing supplement that seems to work. Additional testimonials are coming in. Dave Maxwell continues his series on *Soil Nutrients for Roses*, this month with a comprehensive review of how to build a balanced fertilization program. Save your back issues and Dave's series will be a textbook on rose nutrition. In his *Notebook*, Bill Blevins offers his rose reviews he missed sending to *Horizon Roses 2010*. The latter is a nationally-distributed booklet of rose reviews contributed by top growers and exhibitors. We get an exclusive from Bill. As you plan for spring, take note of Joe Mirilovich's Country Store offerings on p.11. Many hard-to-find products are available at the best prices around. Finally, our local Consulting Rosarians are listed on p.10. Now is a good time to seek out an answer to that question or rose growing problem that you wondered about all year.

Membership Dues are Due!!

Did you forget you dues payment? This is the last issue of the newsletter you will receive from ARF and/or PRS unless you renew for 2011. See page 2 for ARF & PRS rates and terms.

ARF members should send payments to:

Mary A. King-Taylor, ARF Membership Chair, 13933 Leeton Circle, Chantilly, VA 20151

PRS members should send payments to:

Joe Covey, PRS Membership Chair, 831 Azalea Drive, Rockville, MD 20850.

PRS members receiving hard copy: please check your mailing label for non-renewal message (if no message appears, you are paid and recorded for 2011). Email subscribers will receive a separate message in January.

SOIL NUTRIENTS FOR ROSES

David Maxwell

Fertilizer Programs: An Analytic Approach

My previous articles have illustrated numerous fertilizer programs using a variety of products in combinations that provide balanced 'meals' for roses. In this article I will demystify the process of building a fertilizer program by relating the quantity of a product applied to the critical nutrients that quantity provides. This will allow you to tailor a balanced fertilizer program to meet your particular needs.

Requirement

But first it may be useful to review the basics of what constitutes a 'balanced' fertilizer program. In the mid-Atlantic region the average rose bush uptakes (consumes) each essential nutrient in the quantities shown in the table. Chlorine, also an essential element, is not shown as it is abundant in nature and not required in our fertilizer programs. Notice the quantities are relative to a unit of area (e.g., per 1000 sq ft); this takes into account that larger bushes consume more nutrients. The objective of a 'balanced' fertilizer program is therefore to provide an adequate concentration of nutrients in the root zone to satisfy the rose bush's uptake demands, without excessively changing the nutrients stored in the soil; i.e. a soil test of the soil nutrients should be roughly the same at the end of the year as it was at the beginning. More on this later.

The translation of uptake amounts to fertilizer quantities requires an understanding of how fertilizer interacts with soil. The shaded elements in the 'Nominal Rose Nutrient Uptake per Year' Table are the most critical in calculating fertilizer requirements. Normal soil management practices assure the other nutrients are at adequate levels for optimum performance. For example, periodic soil tests can confirm that calcium and magnesium concentrations are adequate and a fall lime application to correct pH will normally be sufficient; calcitic lime for Ca and dolomitic lime for Ca & Mg. Additionally, an annual application of a fertilizer containing the minor elements (Mn, Zn, B, Cu, Mo) may be useful to satisfy the minors.

Of the shaded nutrients, nitrogen (N) is by far the most important. Nitrogen losses due to volatilization and leaching can be very high, requiring one and a half to three times the uptake amount. See accompanying table. Phosphate (P₂O₅) and iron (Fe) interact with soil minerals over time to form precipitates that are unavailable to plants; this is often referred to as fixing. To assure adequate soil concentration levels requires fertilizer applications of P₂O₅ and chelated Fe from two to four times the uptake amount. For non-chelated Fe the fixing is much higher requiring from 10 to 20 times the uptake amounts. For sulfur (S) and potash (K₂O) the fertilizer requirements are very close to their uptake amounts.

Major Nutrient	Lbs Nutrient per 1000 sq ft	Minor Nutrient	Lbs Nutrient per acre
N	16	Fe	4.5
P ₂ O ₅	7	Mn	1.5
K ₂ O	16	Zn	0.9
Ca	9	B	0.8
Mg	4	Cu	0.3
S	5	Mo	0.2

Nominal Rose Nutrient Uptake per Year

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Nutrient	Amount
N	24 to 48 lbs per 1000 sq ft
P ₂ O ₅	14 to 28 lbs per 1000 sq ft
K ₂ O	16 to 32 lbs per 1000 sq ft
S	5 to 10 lbs per 1000 sq ft
Fe	10 to 20 lbs per acre - chelated
	45 to 90 lbs/acre - non-chelated

Annual Fertilizer Recommendation

Sulfur, like N is very mobile in soil and must be replenished frequently.

Table 42 Overview

Table 42 (see page 5) lists a number of fertilizer products popular in the greater Capital Region. For each, several features are listed:

Duration (weeks) - a rough estimate of how long it's nitrogen lasts; this is used to roughly space applications to maintain a continuous supply of N;

Quantity (cups or tbsps) - nominal amount recommended at a single feeding, this is only a guide and may be increased or decreased to suit your goal;

Rate (%) - a quantitative metric measuring the acceptability of the sum of the N nutrients applied at one time; about 100% is normally desired but up to 250% is acceptable, except in very hot summer months;

Nutrients (lbs/1000 sq ft for majors and lbs/acre for minors) - the nutrients provided by the given quantity.

The referenced drip line diameter used in the calculations in Table 42 is 30 inches. If your roses are spaced sufficiently to allow you to spread the fertilizer over a larger diameter, say 42 inches, go into the 'Drip Line Conversions' Table and find the conversion corresponding to a 42 inch drip line, x1.96 in this example, and multiply the 'Quantity' by 1.96. For example, from Table 42, 2 cups of Mills Magic Mix if applied uniformly within a 30 inch drip line, will provide 9 lbs N/1000 sq ft. You will need to increase the amount applied within a 42 inch drip line by 1.96 (i.e., 2x1.96 ≈ 4 cups) to achieve the same 9 lbs N/1000 sq ft.

Drip Line Dia Inches	Area Sq ft	Conversion
60	19.635	X4.00
48	12.566	X2.56
42	9.621	X1.96
36	7.069	X1.44
30	4.909	X1.00
24	3.142	X0.64
18	1.767	X0.36
12	0.785	X0.16
8	0.349	X0.07
6	0.196	X0.04

Drip Line Conversions

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Fertilizers: Extended Duration

The extended duration fertilizers are distinguished primarily by their longevity; they require less work as they are applied less frequently. However they are non-organic and therefore do little to improve the soil. If they are used exclusively, as a minimum apply liberal amounts of mulch or compost as a top dressing to feed the soil micro-organisms.

Osmocote 18-5-12 is difficult to find but is available through the Country Store. It lasts the entire growing season (28 weeks) in the Capital Region and is therefore applied only once a year. It is a complete fertilizer in that it has the three primary majors: N, P₂O₅ & K₂O. It also has Mg, S, Fe, Mn & Zn. The N source is almost equal parts nitrate-N and ammonium-N, making it immediately available for plant uptake in cool weather when microbes are sluggish. Applying 1.5 cups in late March or early April provides the full recommended amount (≈100% rate) and from Table 42 we observe the essential nutrients delivered annually are:

Quantity	N	P ₂ O ₅	K ₂ O	S	Fe
1.5 cup Osmocote 18-5-12	31.3	8.7	20.9	8.7	37.9

A comparison with the 'Annual Fertilizer Recommendation' Table shows almost ideal compliance. The P₂O₅ may appear to be

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Table 42

Fertilizer	Nutrients (%NPK)	N Duration (weeks)	Quantity (cup/tbsp)	Rate %	Nutrients Delivered					
					(lbs/1000 sq ft)				/	(lbs/A)
					N	P ₂ O ₅	K ₂ O	S			Fe
<u>Extended Duration</u>										
Osmocote 98605 (8-9 mon)	18-5-12 †	28	1.5 cup	112	31.3	8.7	20.9	8.7	/	37.9
Osmocote Plus (6 mon)	15-9-12 †	18	1.0 cup	97	17.4	10.4	13.9	4.6	/	22.7
Greenview LF (IBDU)	31-0-0	16	0.75 cup	96	15.4	0	0	0	/	0
<u>Organic</u>										
Espoma Plant-tone	5-3-3	7	2.0 cup	119	8.3	5.0	5.0	1.7	/	0
Espoma Rose-tone	4-3-2	7	2.5 cup	115	8.1	6.0	4.0	4.0	/	0
Mills Magic Rose Mix	6-5-1	7	2.0 cup	129	9.0	7.5	1.5	0	/	0
Fertrell Rose Food	4-2-4	7	2.0 cup	131	9.1	4.6	9.1	0	/	0
Organic Mix *	6.8-3.3-0.8-0.4Fe	7	2.0 cup	133	9.4	4.6	1.1	0	/	24.9
Alfalfa Meal	3-0.5-2	7	1.0 cup	25	1.8	0.3	1.2	0	/	0
Blood Meal	12-0-0-0.3Fe	5	1.0 cup	139	7.0	0	0	0	/	7.1
Bone Meal	4-12-0	7	1.0 cup	56	3.9	11.7	0	0	/	0
Fish Meal	9-3-1	7	1.0 cup	81	5.7	1.9	0.6	0	/	0
Kelp Meal	1-0-2	7	1.0 cup	12	0.8	0.1	1.7	0	/	0
Cottonseed Meal	6-2-1	7	1.0 cup	63	4.4	1.5	0.7	0	/	0
Manure	1-1-1	7	10.0 cup	104	7.3	7.3	7.3	0	/	0
Milorganite	5-2-0-4Fe	7	4.0 tbsp	15	1.0	0.4	0	0	/	36.4
* Mix equal parts of alfalfa meal, fish meal, cottonseed meal, blood meal, bone meal & half part Milorganite										
<u>Granular</u>										
Vegetable Grower	10-10-10 †	5	0.5 cup	120	6.0	6.0	6.0	6.9	/	2.6
Urea	46-0-0	6	3.0 tbsp	113	6.8	0	0	0	/	0
20-20-20 Granular	20-20-20	6	0.25 cup	100	6.0	6.0	6.0	0	/	0
<u>Soluble</u>										
Potassium Nitrate	13.75-0-46	2	1.0 tbsp ❖	53	1.06	0	3.54	0	/	0
Jack's Blossom Booster	10-30-20 †	3	1.0 tbsp ❖	22	0.63	1.88	1.25	0	/	0.27
Peters Professional Gen Pur	20-20-20 †	4	1.0 tbsp ❖	32	1.21	1.21	1.21	0	/	0.13
Jack's Classic All Purpose	20-20-20 †	5	1.0 tbsp ❖	22	1.08	1.08	1.08	0	/	0.23
Miracle-Gro Blossom Booster	15-30-15 †	5.5	1.0 tbsp ❖	13	0.75	1.49	0.75	0	/	0.33
Miracle-Gro for Roses	18-24-16 †	6	1.0 tbsp ❖	18	1.06	1.41	0.94	0	/	0.26
Fish Emulsion	5-1-1	6	1.0 tbsp ❖	6	0.36	0.07	0.07	0	/	0
<u>Supplements</u>										
Gypsum	21Ca-17S	n/a	4.0 tbsp	n/a	0	0	0	5.3	/	0
Epsom salts	10Mg-14S	n/a	1.0 tbsp ❖	n/a	0	0	0	1.0	/	0
Sul-Po Mag	22K-11Mg-22S	n/a	1.0 tbsp	n/a	0	0	2.2	2.2	/	0
Potash (Muriate of)	60K	n/a	1.0 tbsp	n/a	0	0	4.4	0	/	0
Sulfate of Potash	50K-18S	n/a	1.0 tbsp	n/a	0	0	4.4	1.6	/	
Superphosphate	0-20-0	n/a	2.0 tbsp	n/a	0	2.8	0	0	/	0
Triple Superphosphate	0-45-0	n/a	1.0 tbsp	n/a	0	3.2	0	0	/	0
Sequestrene 330 Iron Chelate	0-0-0-10Fe	n/a	0.33 tbsp ❖	n/a	0	0	0	0	/	8.1
Peters S.T.E.M.	minors only	n/a	0.25 tbsp ❖	n/a	0	0	0	0.2	/	6.1
Dragon Iron Chelate w/minors	0-0-0-6Fe †	n/a	0.5 tbsp ❖	n/a	0	0	0	0.1	/	9.1
<u>Specialty Growth Stimulate Additives</u>										
Humic Acid ❖	1.0 tbsp/gal - 1 gal/bush/month									• improves mineralization (20X) of nutrients, CEC, soil structure
SuperThrive ❖	4.0 tbsp/32 gal - 1 gal/rose - apply once each bloom cycle									• stimulates growth (triacontanol)
Response	Foliar feeding - 1tbsp per gallon of spray									• stimulates growth & increases resistance to disease
† Contains minors	❖ Mix with water and apply as a liquid ground drench									

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slightly low, until you realize these nutrients are slowly released and available immediately before they have time to become fixed. In this case anything above the rose uptake demands of 7 lbs N/1000 sq ft is sufficient (see 'Nominal Rose Nutrient Uptake per Year' Table). The iron (non-chelated) is not slowly released and therefore needs to be at the higher level to have sufficient availability at the end of the season when fixing is more pronounced.

For those unable to find Osmocote 18-5-12, **Osmocote Plus 15-9-12** is a good substitute. It is readily available in stores but lasts only half the season and therefore requires two applications per year, April 1 & July 1. It also has minors and its N is also about equally divided between nitrate and ammonium. From Table 42 the essential nutrients delivered are:

Quantity	N	P ₂ O ₅	K ₂ O	S	Fe
1 cup Osmocote Plus - Apr 1	17.4	10.4	13.9	4.6	22.7
1 cup Osmocote Plus - Jul 1	17.4	10.4	13.9	4.6	22.7
Annual Total	34.8	20.8	27.8	9.2	45.4

This also yields ideal results with only slightly more work.

Fertilizers: Organics

I consider organic fertilizers to be the 'meat & potatoes' of any good fertilizer program. Although all-organic programs are slightly more work than the extended duration-all chemical programs, in the long run they are better for the soil and will yield better results with less fertilizer because they create a much healthier soil teeming with beneficial micro-organisms. Every rosarian should use one or more of these at least once a season. Their duration ranges roughly from 5 to 8 or 9 weeks, requiring three applications a year; April 15, June 15 and August 15 are good target dates to work with in the Capital Region. April 15 is about the earliest soil temperatures will support active microbial activity to breakdown the organics into plant useable ammonium-N and nitrate-N, and August 15 is about the last date without encouraging new growth as the plants are going into dormancy latter in the year.

Espoma Rose-tone and Espoma Plant-tone are two of the best known and most widely available complete organic fertilizers. Let's compare them: from Table 42, 2.0 cups of Plant-tone provide a 119% rate, whereas Rose-tone requires 2.5 cups to provide about the same rate (115%). Since they cost the same, Rose-tone is 25% more expensive to use. With 3 applications the total nutrients compared are:

Quantity	N	P ₂ O ₅	K ₂ O	S	Fe
2.5 cup Rose-tone (3x)	24.3	18	12	12.0	0
2.0 cup Plant-tone (3x)	24.9	15	15	5.1	0

By observation Plant-tone has a slightly better balance between P₂O₅, K₂O & S; use of Rose-tone would require a supplement of 1 tbsp of muriate of potash to bring the K₂O within an acceptable range. Neither has any minors, so an iron supplement is required for both. A robust program (179% rate) would be 3 cups Plant-tone and 3 tbsp Milorganite April 15, June 15 and August 15, resulting in:

Quantity	N	P ₂ O ₅	K ₂ O	S	Fe
3 cup Plant-tone (3x)	37.4	22.5	22.5	7.7	0
3 tbsp Milorganite (3x)	2.4	0.9	0	0	81.9
Total	39.8	23.4	22.5	7.7	81.9

Fertilizers: Granular & Soluble

The main distinction between these groups is how they are applied: granular, in dry form, and soluble, mixed with water. Both categories have complete fertilizers (except urea). They can be used exclusively in stand-alone programs, but are normally used to fill some specialty spot. Most notably: Vegetable grower, contains a complete complement of micronutrients; potassium nitrate, Jack's Blossom Booster 10-30-20 and Peter's Professional 20-20-20 are excellent sources of nitrate-N for an early spring boost and; fish emulsion is excellent to promote microbial activity for bigger and more colorful blooms.

Fertilizers: Supplements

These are non-nitrogen fertilizers providing one or more of the other nutrients to supplement your core program. An extreme example relates to the choice of either IBDU (extended duration) or urea (granular) as your core fertilizer program; both are exclusively sources of N. Used as a base they require supplements from a source containing P₂O₅ (e.g. superphosphate), K₂O (e.g. muriate of potash), S (e.g. gypsum), and Fe (Sequestrene).

Fertilizers: Growth Stimulants

As the title suggests these are specialty products used by some to promote growth and improve vigor.

Summary

Although the main theme of this article is how to create 'balanced' fertilizer programs, I need to emphasize that this is not always necessary as the soil is a great buffer of nutrients. What the program doesn't supply, the soil usually will. For example, the exclusive use of Mills Magic Mix (3 applications) would provide:

Quantity	N	P ₂ O ₅	K ₂ O	S	Fe
2 cup Mills Magic Mix (3x)	27.0	22.5	4.5	0	0

Although, this could do quite well initially, the soil would, in time, become depleted of K₂O, S & Fe. Using 'balanced' programs supplies all the nutrients in accordance with the rose's uptake and will not place significant demands on the soil reserves.

I conclude with an example illustrating the use of Table 42. I use *Mills* as the base, augmented with: *Alfalfa Meal* which contains triacantanol (a growth stimulant), fixes nitrogen, encourages microbial activity and improves soil structure & tilth; *Kelp Meal* which is rich in minerals, amino acids and vitamins which energize microbes and provides important nutrients, and; *Blood Meal* which is high in N.

Quantity	N	P ₂ O ₅	K ₂ O	S	Fe
LF (w/Sequestrene) - Apr 1	0.99	1.95	1.32	2.0	8.37
2 cup Mills - Apr 15	9.0	7.5	1.5	0	0
1 cup Alfalfa Meal - Apr 15	1.8	0.3	1.2	0	0
1 cup Kelp Meal - Apr 15	0.8	0.1	1.7	0	0
2 tbsp Muriate of Potash - Apr 15	0	0	8.8	0	0
LF (w/SUPERthrive) - May 1	0.99	1.95	1.32	2.0	0.27
0.5 cup Blood Meal - May 15	3.5	0	0	0	3.5
LF (w/SUPERthrive) - Jun 1	0.99	1.95	1.32	2.0	0.27
1 cup Mills - Jun 15	4.5	3.75	0.75	0	0

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0.5 cup Blood Meal - Jun 15	3.5	0	0	0	3.5
LF (w/SUPERthrive) - Jul 1	0.99	1.95	1.32	2.0	0.27
0.5 cup Blood Meal - Jul 15	3.5	0	0	0	3.5
LF (w/SUPERthrive) - Aug 1	0.99	1.95	1.32	2.0	0.27
1 cup Mills - Aug 15	4.5	3.75	0.75	0	0
0.5 cup Blood Meal - Aug 15	3.5	0	0	0	3.5
LF (w/SUPERthrive) - Sep 1	0.99	1.95	1.32	2.0	0.27
Total	40.5	27.1	22.6	12.0	23.7

For the Liquid Formula (LF), mix the following in one gallon of water and apply within the drip line:

LF	N	P ₂ O ₅	K ₂ O	S	Fe
1 tbsp Jack's 10-30-20	0.63	1.88	1.25	0	0.27
2 tbsp Epsom salt	0	0	0	2.0	0
1 tbsp Fish Emulsion	0.36	0.07	0.07	0	0
0.33 tbsp Sequestrene †	0	0	0	0	8.1
0.5 tsp SUPERthrive †	0	0	0	0	0
1 tbsp Humic Acid	0	0	0	0	0
Totals	0.99	1.95	1.32	2.0	8.37

† Optional, include only as called for

This Liquid Formula contains a variety of very important supplements. The Jack's 10-30-20 is an important source of P₂O₅ and the N is balanced between nitrate-N and ammonium-N for immediate availability. Epsom salt (magnesium sulfate) is the only significant source of S, which because it is highly mobile in soil must be applied several times throughout the season. Fish emulsion is an important energy source for the soil microbes. Sequestrene is the early Spring source of Fe (chelated) and augments the Fe from Blood Meal (effectively chelated since it is slowly released from an organic source). Although SUPERthrive and Humic Acid do not contribute to the nutrients, per se, they do aid in the uptake of nutrients. SUPERthrive, a concentrated form of triacontanol from Alfalfa Meal stimulates growth while Humic Acid improves the mineralization of nutrients and improves soil structure.

Since I applied three fertilizers simultaneously on April 15, I need to check the sum of the 'rates' to see how it compares with my 250% limit: 2 cup Mills 129% + 1 cup Alfalfa 25% + 1 cup Kelp 12% = 166%. This is well below my 250% limit. but note the next feeding on May 15 of 0.5 cup Blood Meal, 70% rate, overlaps by 3 weeks with the April 15 feeding (7 week duration); the sum of these is April 15 feeding 166% + May 15 feeding 70% = 236%. This is close to my 250% limit but OK as long as you water well (at least 4 to 5 gallons twice a week). Note the June 15 and August 15 feedings are 1 cup Mills 65% + 0.5 cup Blood Meal 70% = 135%, also good.

That's all there is to it. You are now armed with sufficient information to provide 'balanced' meals to your roses using the products you prefer. If you prefer a product not on my list, contact me and I will provide the 'quantity' ↔ 'nutrient' relationship, assuming I can obtain a sample.

Please send questions to davesroses@yahoo.com.

(Continued from page 1) SUPERthrive

production of new blooms, even in the middle of summer, and provides the rose with a certain amount of resistance to diseases such as blackspot and rust (the latter is not a problem in the DC area, but I have encountered it on my roses in Montevideo). In the past, I attributed this to my use of regular fertilizers such as Osmocote and a regular disease preventive spray program. However, after comparing some bushes to which I did not give SUPERthrive to others where I included it in my fertilizer program, I became convinced of the product's benefits as described above.

I generally use SUPERthrive about three times during the growing season: early in the spring, mid-summer, and early fall or when a rose seems to be performing poorer than expected.

At Dave Maxwell's suggestion, SUPERthrive should be used at the rate of about four tablespoons for 32 gallons of water, giving each rose one gallon of the mixture. For those with small gardens, he recommends about 1/3 to 1/2 teaspoon to one gallon of water, which is the ratio I have been using in my apartment terrace gardens.

Finally, it should be noted that the Vitamin Institute, the manufacturers of SUPERthrive, also claims that in addition to roses, the use of SUPERthrive can benefit many other types of indoor and outdoor plants including trees, bulbs, seeds, and lawns.



BILL'S ROSE NOTE BOOK



by *Bill Blevins*

ARF Consulting Rosarian

For this edition we will attempt to comment on *Horizon Roses 2010*. I missed the 2010 edition and so will compile my comments here. The publication is available at \$10 each from Robert B. Martin, Jr., 2609 Canyon Crest Dr., Escondido, CA 92027-4908 – **request the 2010 edition.**

There are a lot of newer introductions by some of the nation's hybridizers and smaller outlets. I've always been high on Whit Wells' introductions, who provides product through Wells Midsouth Roses, Brighton, TN, among others. He utilizes charismatic names and titles of entertainers and their songs, in Nashville and Memphis mostly. Let's please inform Whit Wells he needs some Bluegrass music influence into his naming regime to add a little pizzazz to his overall scheme. Who could resist buying a rose named "Sally Mountain" or "Katie Daley?" Fred Wright from NC has a rather endless supply of seedlings and sports of various roses. How long will it be before he names one "The Wright Stuff?" Several others seem to have a never ending array of sports, ex. – The Alonso family. All are interesting observations. I've prepared this article the week of Christmas and may be unduly influenced by too many sidetracks, too much to eat, too much good company and (not) too much to drink. The rum in the eggnog, XXX cider, Pomegranate Martinis and dynamic whiskey sours have been quite an aid. Here goes!

The (Un)Official Horizon Roses 2010

HYBRID TEAS

April in Paris – Takes about 3 years to get established. Not a big bloom, color not as drab as some describe it, this pink/cream blend has good form and has a good stem. Forgive the size and enter 3 of a kind if a show is around.

Artic Circle – It's not a spelling bee, Judges. It's registered just like you see it here. Huge pink blend blooms can come in size 6 or 7 (inches) and can compete with the best of them.

California Dreamin' – Nice size to fairly large pink/

white blend. Not every bloom is great but form can be there. Lots of roses in this color type so future as a show rose somewhat limited. Was the name of a song also (Mamas and Papas?) since that seems to be fashionable lately.

Denali – Huge blooms, one 7" beauty took Queen in Philadelphia this year (Ken Borrmann). Huge, fairly hardy plant requires special pruning. Thought – grow as a climber and train horizontally.

Desparado – Red/white blend with good form. Not a bad guy as the size is not overly large but consistent, another variety with song connections (think Linda Ronstadt or Johnny Rodriguez, et al.).

Dina Gee – Red/white blend on a great stem. From Silver Run Nursery (John Smith) and it won a Queen locally this past spring.

Gentle Giant – Not that big and color is not really memorable. A disappointment since one of its parents is **Rina Hugo**, one of my favorites.

Grande Amore – A new red HT with great potential. Have seen nice spiral form and pinpoint centers. Not the older orange/red Kordes HT which it ironically somewhat resembles.

King Kong – Seen it and like it. White with a champagne tone to the color, good form and very long lasting. Good producer, but I haven't personally seen a lot of large blooms.

Over the Moon – Easy to grow, improved version of Just Joey perhaps. Better slow opening form as JJ but not as large a bloom, nice stems. Probably has a future by virtue of its color – a pleasing deep apricot.

Parole – Still being reported on and not that new anymore. Huge, perfect form, very fragrant deep mauve pink. Formerly called Buxom Beauty but apparently that name has been dropped. Santa's helper said Dolly Parton trademarked that name and wouldn't release it.

Pink Promise – Thought it was just another AARS dud but matured quickly and put out large, excellently formed blooms of very light pink, especially in the fall.

Pope John Paul II – Not impressed until some this year. More blooms start appearing with good form, super fragrance but size is still a question mark.

Randy Scott – exactly what you would hope for with a **Crystalline** x **Moonstone** cross. Arguably better than either and very much sought after nationwide. Perfect white color also is very fragrant, more so in the warmer microclimates.

Secrets Out – Sport of Secret. The secret is out (smaller, whiter, fewer petals) and is being dropped by Weeks' Roses after one year.

Sedona – So much hoopla over this improved version of

(Continued on page 9)

(Continued from page 8) Notebook

Artistry that too much was expected. Not that bad and should get better as plant matures.

Snuffy – Another Silver Run Nursery member that is gaining rapid distinction nationwide. Unique pink/orange blend varies with season and microclimate. Some blooms are much more high centered at times.

Soul Mate – I remember this name being mentioned on a tour of John Smith's garden. I thought he was referring to Cherylynn and/or an unnamed seedling, but it's also a pink blend HT that Bob Knerr says is good and hard to find, only from Silver Run Roses. He has an exclusive on the gal and the rose so order it from him.

Tahitian Sunset – A worthy AARS winner that comes in a rare apricot blend of color and is nicely scented.

GRANDIFLORAS

Dick Clark – Smallish bloom with great form and beautiful red blend color. All one to a stem and not a lot of petals – like its namesake bloom is very long lasting.

Dream Come True – AARS from an amateur hybridizer. Color plates in catalogs were nice but this was a nightmare for me. Opens fast, slow repeat and not hardy.

Wild Blue Yonder – Great mauve blend color, excellent fragrance and generous sprays. Form is variable but blooms are long lasting and look better more open anyway.

FLORIBUNDAS

Colorific – Beautiful **Color Magic** coloration. Great form but shy on petals, it still looks terrific in full bloom stage; not many sprays.

Kimberlina – Plain Jane pink color is attractive and comes in well spaced sprays. Sprays every season of the year, can win a show (as it has locally), great budding rose.

Monkey Business – Never without bloom in singles and sprays. Bright yellow makes great container plant and has extra large blooms late in the season.

Moondance – Excellent AARS choice. Clean white on upright productive plant with singles and sprays all year and crisp dark green foliage.

Pumpkin Patch – Unusual blend of orange with unusual roundish form on unusually growing plant which requires cutting back dead end growth along stems. If unusual is your thing, try it.

Vavoom – Striking, intense orange color that is quite memorable and has won locally at the show. The last time I said Vavoom my nephew married her

White Licorice – Long lasting pale yellow opens flat, but makes a decent cut flower. I like licorice but can't pick

up the anise scent in this one.

MINIFLORAS

Brand New Girlfriend – Everybody should have one! I had one once that was well formed, good habits and pleasingly leggy but I got drafted. Anyway a new mauve miniflora from Whit Wells. So far “can have” and “potential” seem to describe it. I assume it is named for Brad Paisley's top 40 hit but, if trivia is your thing, I assure you it was first recorded in the 1980's by Bobby Lee Springfield (for you rockabilly cultists) and was one of the first made for TV music videos. It was very popular, lasting for several months.

Coal Miner's Daughter – Pink Blend from Whit Wells, “serious potential” is the byword but also a great movie biography of Loretta Lynn, who by the way is Chloa's distant cousin.

Power Point – Medium red from Bernadella (2008 AOE), good form and color with pinpoint centers. He won several Queens across the country.

Show Stopper – Apricot blend from Bernadella, won a pile of Queens nationwide. Two words on your entry card please if showing, or else it is misnamed. There is a red HT named **Showstopper**.

Tabasco Cat – Orange red, blooms like crazy and makes memorable sprays such as the one that won at the PRS show.

MINIATURES

Brenda Lee – Yellow blend from Whit Wells, more orange than yellow and like Dick Clark, Brenda Lee seemingly lives forever. She should be singing “I'm Sorry” if you are confusing this one with the first **Brenda Lee** introduced in 1991. It was a Mike Williams yellow blend (MIKlee) int., and is not the same rose.

Shameless – Red blend (not mp as listed), rapidly growing popularity and at the rate its winning trophies, could seemingly affect the price of silver. A Whit Wells introduction, and for the trivia aficionados, a huge hit for Garth Brooks.

John Boy – Yellow blend from Rosemania that does nothing to recommend it further. Is this the year of John Boy? There was an apple and a peach newly introduced under that name and already an apple sport called John Boy II.

Joy – Pink blend, it is a joy to behold. Get it! Seen it and it won locally. Great sprays also. Over 60 ARS awards since 2008 including nearly 20 Queens.

Happy New Year!

Local ARF and PRS Consulting Rosarians (as of January 2, 2011)

For free help with your rose questions, you may call on the following Consulting Rosarians. All are volunteers who have been certified and appointed by the American Rose Society to serve as expert advisors on rose culture and rose-growing problems. The individuals listed below are ARF and/or PRS members located in the greater Washington Metropolitan area and they can answer your questions with knowledge of local growing conditions. See www.ARS.org for national listings of Consulting Rosarians.

Name	City	State	Home Phone	E-mail	Local Society
Active					
*Michael J. Berger.....	McLean.....	VA ...	703-848-1942...	emamike@aol.com	Arlington, Potomac
*Nita Bowen	Oakton	VA ...	703-620-9768...	varoselady@cox.net.....	Arlington, Potomac
Rick Brown.....	Locust Grove ...	VA ...	540-972-1821...	rickbrown51@verizon.net	Arlington, Potomac
*Joseph M. Covey	Rockville.....	MD...	301-279-0028...	coveyj@earthlink.net.....	Potomac
Melanie Dostis	McLean.....	VA ...	703-821-0429...	pooheads@juno.com	Potomac, Arlington
A. Joseph Dysart.....	Arlington.....	VA ...	703-532-7765...	alfredjdysart@cs.com	Arlington, Potomac
Sharlie Eaton.....	Oakton	VA ...	703-939-1608...	loverofroses@gmail.com	Arlington, Potomac
Steven A. Gavey	Darnestown.....	MD...	240-531-2445...	sgavey@gmail.com	Potomac
Clifton B. Jeter.....	Silver Spring	MD...	301-460-8669...	cbjeter@verizon.net.....	Arlington, Potomac
Diana Klassy	Lexington Park MD...	301-863-5186...	diana_n_roses@netzero.com	Arlington	
*Capt. Eddy Krauss	Amissville.....	VA ...	540-937-2177...	rosemeister19@comcast.net	Arlington, Potomac
Dave Maxwell.....	Fairfax.....	VA ...	703-860-0071...	davesroses@yahoo.com.....	Arlington, Potomac
*Joseph J. Mirilovich....	Oakton	VA ...	703-620-5825...	jjmirilovich@aol.com	Arlington
Charles Munday, Jr.....	Hagerstown.....	MD...	301-739-4669...	.....	Arlington
Dr. William Osburn	Bethesda	MD...	301-530-6252...	drwilliamosburn@yahoo.com ...	Arlington
Robert L. Ruby	Hagerstown.....	MD...	301-739-8898...	.....	Arlington
John W. Simonton, Jr....	Fairfax.....	VA ...	703-380-2667...	oscar180@aol.com	Arlington
David Walsh	Hampstead	MD...	410-374-1010...	shiloh@qis.net	Potomac
Nicholas E. Weber.....	Brookeville	MD...	301-774-2806...	heritagero@aol.com.....	Potomac
*Master Consulting Rosarian					

Emeritus

Bill Blevins	Manassas.....	VA ...	.....	.....	Arlington
Joseph E. Ennis.....	Washington.....	DC ...	.....	.....	Potomac
C. Roger Nelson	Bethesda	MD...	.....	.....	Potomac

2011 ARF COUNTRY STORE ORDER FORM

Joe Mirilovich, Manager
2817 Center Ridge Drive
Oakton, VA 22124 703-620-5825

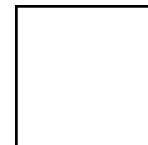
Name _____ Phone No. _____
Address _____

This is a private price list of rose products available through ARF. Products are for ARF members or members of other local garden clubs. ARF's Country Store operates on an advance basis, therefore payment must accompany the order. Make checks payable to Arlington Rose Foundation. Products will be available mid-March. Call Joe Mirilovich for special pick-ups.

CHEMICALS	SIZE	PRICE	QTY	SUBTOTAL
Honor Gard (generic for Banner Maxx)	16oz.	\$42.00		
Bayer 3 in 1 (for fungi-insects-mites)	32oz.	\$18.00		
Clearys 3336 Flo (for fungi)	32oz.	\$65.00		
Dithane M-45 (mancozeb)	6oz.	\$10.00		
Merit 75WP (for insects)	2oz.	\$55.00		
Shuttle (for mites)	16oz.	\$125.00		
Hoist (for powdery mildew)	3oz.	\$22.00		
Avid 0.15 EC (for mites)	8oz.	\$95.00		
Tetra San 5WDG (for mites)	2 oz.	\$20.00		
FERTILIZERS	SIZE	PRICE	QTY	SUBTOTAL
Osmocote 18-5-12 w/Minors (8/9 mo.)	50lbs.	\$58.00		
Jacks Blossom Booster 10-30-20	25lbs.	\$40.00		
Bone Meal 4-12-0	50lbs.	\$40.00		
Blood Meal 12-0-0	50lbs.	\$50.00		
Cottonseed Meal	50lbs.	\$27.00		
Mills BloomKote	20lbs.	\$42.00		
Mills Magic Mix	20lbs.	\$18.00		
Mills Easyfeed Liquid Concentrate	1/2 Gal.	\$17.00		
Fish Emulsion 5-1-1	Gal.	\$15.00		
Humic Acid	Gal.	\$15.00		
Mills Rose Starter 11-40-6	20lbs.	\$15.00		
Fish Meal	50lbs.	\$65.00		
Humates	50lbs.	\$25.00		
MISCELLANEOUS	SIZE	PRICE	QTY	SUBTOTAL
Eon Metal Rose Markers	3 markers	\$1.00		
Garden Gypsum	36lbs.	\$15.00		
Maxicool Gloves Large	Pair	\$5.00		
Maxcool Gloves X-Large	Pair	\$5.00		
Epsom Salt	50lbs.	\$20.00		
Indicate 5	16oz.	\$15.00		
Perlite	4 cu ft Bag	\$20.00		
Pro Mix BX (planting medium)	3.8 cu ft Bale	\$27.00		
FELCO PRUNERS	SIZE	PRICE	QTY	SUBTOTAL
F-2 Original Pruners	Each	\$39.00		
F-6 For Smaller Hands	Each	\$39.00		
F-7 Ergonomic Handle	Each	\$50.00		
F-9 Left-Handed	Each	\$39.00		
Folding Saw	Each	\$20.00		
F210C-40 Carbon Fiber Lopper 16 in	Each	\$52.00		
TOTAL				

The Capital Rose
831 Azalea Drive
Rockville, MD 20850-2018

First Class



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Sunday, March 13, 2011, 2:00 p.m.

Arlington Rose Foundation

Monthly Meeting

Adventures of a Novice Rosarian

Speaker: Stuart Houston

Merrifield Garden Center

Sunday March 20, 2011, 2:00 p.m.

Arlington Rose Foundation

Bon Air Memorial Rose Garden,

Arlington, VA

Pruning Demonstration

ARF Consulting Rosarians

Thursday, March 17, 2011, 7:30 p.m

Potomac Rose Society

Monthly Meeting

All About Pruning

McLean Governmental Center,

McLean VA

Thursday, April 21, 2011, 7:30 p.m.

Joint Arlington Rose Foundation & Poto-

mac Rose Society Monthly Meeting

McLean Governmental Center

Fertilizing Roses - Dos & Don'ts

Speaker: Dave Maxwell,

Consulting Rosarian