General Considerations

Roses, like many other plants, perform best when fed well. The inside page of this brochure lists several examples of good fertilizer programs designed to suit various user preferences.

Roses like a balanced meal of the Primary major nutrients Nitrogen (N), Phosphorus (P, but sold as Phosphate (P₂O₅)) and Potassium (K, but sold as Potash (K₂O)); the Secondary major nutrients Calcium (Ca), Magnesium (Mg) and Sulfur (S); and the Micronutrients Iron (Fe), Manganese (Mn), Zinc (Zn), Boron (B), Copper (Cu), Molybdenum (Mo) and Chlorine (Cl).

In the Mid-Atlantic Region most soils with normal soil management practices (e.g., lime to correct pH and occasional micronutrient applications) provide all of these in adequate amounts, except N, P₂O₅, K₂O, S and Fe. These must be provided by your fertilizer program. Look for these specifically on the labels of fertilizer.

Most any fertilizer containing these essential nutrients is good, although organic fertilizers (those with plant and/or animal ingredients) are better for the soil and will yield better results with less fertilizer over the long term than chemical (manufactured or mined) fertilizers. Espoma Plant-tone is an example of an organic and Osmocote of a chemical fertilizer.

Roses are heavy feeders and tend to respond well to annual N applications ranging from 16 lbs N/1000 sq ft to 48 lbs N/1000 sq ft. However soil acts as an amazing buffer for some nutrients, supplying them when applications are insufficient and storing them (except N & S) when applications are excessive. This allows roses to grow for long periods without fertilization, albeit at reduced performance levels.

As a general rule, the first feeding for roses in the Capital Region should occur immediately after spring pruning (late March/early April), a second about mid-June and the last about mid-August. Fertilizer applied much later in the year will encourage new growth and delay the plant's entry into dormancy. The shorter duration solubles can be made as late as Sept 30. Roses will continue to bloom well into November, without additional fertilizer. Some extended duration fertilizers like Osmocote (9 month duration) require only one application in the spring, immediately after pruning.

Most fertilizers tend to acidify the soil (lower the pH), requiring an application of from ¼ to ½ cup of lime in the fall to maintain pH in the ideal 6.25 to 6.75 range.

CONSULTING ROSARIANS
of the
Arlington Rose Foundation

Consulting Rosarians (CRs) are certified by THE AMERICAN ROSE SOCIETY after successfully demonstrating expert knowledge on rose culture. A select few rosarians who have been CRs for at least 10 years and provided outstanding service to others, have been elevated to the status of Master Consulting Rosarian (M). All are available free of charge to assist and advise on rose culture and problems, help anyone start new rose gardens and in every way share their knowledge with others. You may feel free to call upon them with questions or for assistance.

Michael Berger (M) 703-848-1942
Nita Bowen (M) (703) 620 9768
Dink Dinkins (703) 978 6387
Joe Dysart (703) 532 7764
Clif Jeter (301) 460 8669
Capt Eddy Krauss (M) (540) 937 2177
Joe Mirilovich (M) (703) 296 1001 (c)
Robert Ruby (301) 739 8898
Bill Blevins 703-368-1748
Rick Brown (540) 972 1821
Melanie Dostis (703) 821 0429
Sharlie Eaton (703) 938 1608
Diana Klassy (M) (301) 863 5186
Dave Maxwell (571) 278 3132 (c)
Charles Mundey (301) 739 4669
John Simonton (703) 380 2667 (c)
(c) mobile phone

(c) mobile phone

rev Mar 2012

Affiliated with the American Rose Society

Published by Arlington Rose Foundation
www.arlingtonrose.org
Some Examples of Fertilizer Programs

All of the following programs will provide good results. Choose one that works for you. The first group of programs uses products readily available locally, while the second group uses products more difficult to find, but which are available with membership in the Arlington Rose Foundation. The second group is illustrative of programs that may provide marginally better performance. However most will be very pleased with one from the first group, especially those with high organic content.

The amounts shown are for average size roses (e.g. hybrid teas spaced 30 inches). Apply twice the amount to large bushes & climbers, one-half to small bushes and one-quarter to potted plants (about 15 inch diameter).

❖ Organic: \(N = 27.1 \text{ lbs/1000 sq ft (option } N = 39.6)\)
- Apr 15 2 cup Espoma Plant-tone 5-3-3
- Apr 15 1/2 cup Milorganite (for Fe)
- Jun 15 2 cup Espoma Plant-tone 5-3-3
- Aug 15 2 cup Espoma Plant-tone 5-3-3

If Espoma Rose-tone 4-3-2 is substituted for Plant-tone the Rose-tone must be increased to 2 1/2 cups and 1 tbsp of muriate of potash must be added in Apr to achieve the same results. Increasing the Plant-tone to 3 cups will increase the \(N\) to 39.6 and probably yield marginally better results.

❖ Extended duration: \(N = 34.8 \text{ lbs/1000 sq ft}\)
- Apr 1 1 cup Osmocote Plus 15-9-12
- Jul 1 1 cup Osmocote Plus 15-9-12

Osmocote Plus is formulated to last the half season and provides all the necessary nutrients.

❖ Organic + extended duration: \(N=29.9 \text{ lbs/1000 sq ft}\)
- Apr 1 1/2 cup Osmocote Plus 15-9-12
- Apr 15 1 cup Espoma Plant-tone 5-3-3
- Jul 1 1/2 cup Osmocote Plus 15-9-12
- Jun 15 1 cup Espoma Plant-tone 5-3-3
- Aug 15 1 cup Espoma Plant-tone 5-3-3

This combines the advantages of Osmocote to provide a steady base of \(N\) throughout the season and of Plant-tone to provide organics that improve the soil.

❖ Liquid: \(N = 34.7 \text{ lbs/1000 sq ft}\)
- Apr 1 1 gal LF (see end w/Jack's Blos Boost 10-30-20)
- Apr 15 1/2 cup Milorganite (for Fe)
- Apr 15 1/4 cup gypsum (for \(S\))
- Jun 15 1/2 cup granular 20-20-20
- Aug 15 1/2 cup granular 20-20-20
- Aug 15 1/4 cup gypsum (for \(S\))

If using 10-10-10 granular, double the amount.

❖ Organic + liquid: \(N = 35.2 \text{ lbs/1000 sq ft}\)
- Apr 1 1 gal LF (see end w/Jack's Blos Boost 10-30-20)
- Apr 15 2 cup Espoma Plant-tone 5-3-3
- Apr 15 1/2 cup Milorganite (for Fe)
- May 1 1 gal LF (see end w/Jack's Classic 20-20-20)
- Jun 1 1 gal LF (w/Jack's Classic 20-20-20)
- Jun 15 2 cup Espoma Plant-tone 5-3-3
- Jul 1 1 gal LF (w/Jack's Classic 20-20-20)
- Aug 1 1 gal LF (w/Jack's Classic 20-20-20)
- Aug 15 2 cup Espoma Plant-tone 5-3-3
- Sep 1 1 gal LF (w/Jack's Classic 20-20-20)

❖ Organic + extended duration + liquid: \(N = 31.8 \text{ lbs/1000 sq ft}\)
- Apr 1 1/2 cup Osmocote 18-5-12
- Apr 15 1 cup Osmocote 18-5-12
- May 1 1 gal LF (see end w/Peters Prof 20-20-20)
- Jun 1 1 gal LF (w/Peters Prof 20-20-20)
- Jun 15 1 cup Mills Magic Mix 6-5-1
- Jul 1 1 gal LF (w/Peters Professional 20-20-20)
- Aug 1 1 gal LF (w/Peters Professional 20-20-20)
- Aug 15 1 cup Mills Magic Mix 6-5-1
- Sep 1 1 gal LF (w/Peters Professional 20-20-20)

❖ Organic plus liquid fertilizer program: \(N = 36.3 \text{ lbs/1000 sq ft}\)
- Apr 1 1 gal LF (w/Jack's Blos Boost 10-30-20)
- Apr 15 2 tbsp Muriate of Potash
- Apr 15 1 cup Mills Magic Mix 6-5-1
- Apr 15 1 cup kelp meal 1-0.15-2
- Apr 15 1 cup alfalfa meal 3-0.5-2
- Apr 15 1 cup fish meal 9-3-1
- May 1 1 gal LF (w/Jack's Blos Boost 10-30-20)
- May 15 1/2 cup blood meal 12-0-0
- Jun 1 1 gal LF (w/Jack's Blos Boost 10-30-20)
- Jun 15 1 cup alfalfa meal 3-0.5-2
- Jun 15 1 cup blood meal 12-0-0
- Jul 1 1 gal LF (w/Jack's Blos Boost 10-30-20)
- Jul 15 1/2 cup blood meal 12-0-0
- Aug 1 1 gal LF (w/Jack's Blos Boost 10-30-20)
- Aug 15 1 cup alfalfa meal 3-0.5-2
- Aug 15 1/2 cup blood meal 12-0-0
- Sep 1 1 gal LF (w/Jack's Blos Boost 10-30-20)

❖ Liquid Formula (LF) - mix following in water:
- 1 tsp/gal soluble fertilizer as specified
- 1 tsp/gal fish emulsion (loved by roses)
- 1 tsp/gal Epsom salts (for \(S\))
- 1 tsp/gal humic acid (incl only in 2nd group of programs)
- 0.375 tsp SUPERthrive (contains triacontanol)

Remember: water-water-water-water before and after fertilizing.