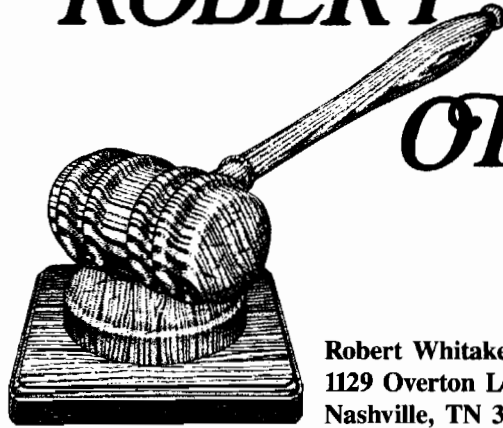




# ROBERT'S RULES OF ROSES



**Robert Whitaker**  
1129 Overton Lea Road  
Nashville, TN 37220

This spring the Nashville Rose Society had some excellent thoughts on fertilization of roses presented to its members. The first was an excellent article in our local *Rose Leaf* by Cliff Cleage, our top Consulting Rosarian, on the fertilizing program he uses to care for the 350 plants in the Cheekwood Rose Garden. The second was a program on the same subject presented by Monty Justice of Louisville, Kentucky, giving his special insights and experiences in caring for 40 gardens. Frequently, we read articles giving formulations of individual fertilizers of all types but seldom on how a rose grower should put the whole combination together. Here are some thoughts on putting the pieces of the puzzle together.

Monty's experience with taking over the care of several rose gardens found many which flourished for a time, then declined. Adding more fertilizers had no beneficial effect. His reasoning led him to realize that most fertilizers tend to add acidity to the soil with continued use so that the pH balance is under constant change by what we add to our beds. Uncle Charlie's admonitions about regular use of lime had been filed away but not put into practice. All of the materials being added were lowering the pH, but nothing was counterbalancing them. He began a program of adding dolemite lime which will work slowly for six to nine months and hydrated lime which acts quickly and lasts for four to six weeks, and the results were dramatic — sudden revival of strong growth. The pH adjustment back to the ideal range of 6.5 allowed the fertilizer, whether granular or soluble, to begin to function. Monty uses a reagent and color chart method of testing for pH and checks at the root zone, not just at the surface.

The other important factor in older rose gardens was soil compaction with time. By forking in sand around the plants, he re-introduced passages for air (oxygen) to penetrate to the root zone and act with the water and fertilizer. Improved growth occurred rapidly. In these gardens no permanent material to aerate the soil had been used in the bed preparation. Perlite, an inert material which does not break down, is widely used to provide these vital air spaces down to the root zone in many rose gardens in this area. Vermiculite is NOT a good substitute for Perlite, as it remains waterlogged.

Monty used one-third peat moss in a planting mixture but adds dolemite limestone (70% calcium sulphate, 13% magnesium sulfate) in with it to balance the acidifying effect. Others use rotten hardwood sawdust or manure for this part. One-third is sand (or Perlite), and the other third is topsoil. The idea is a

mixture that goes "swoosh." That means water goes down quickly and leaves room for the air to follow. If your rose bed gives off a "swish" (waterlogged sound) instead of a "swoosh," it is time for action.

Here is a table developed by our noted soil tester, Leroy Issacs of Louisville, Kentucky, giving information on how much lime to use to raise the pH one and two points along with the amount to use to keep the pH unchanged by adding the listed fertilizers. You can file this away, but Monty urges you to use it also. The table tells you to use 59 lbs. of lime on your garden to balance the acidity if you use 100 lbs. of ammonium nitrate as a quickly available source of nitrogen in your spring feeding. Did you do this?

There are special areas in the southwest U.S.A. with highly alkaline soils and available water which need variations from the experience cited here, for which consultation with your local consulting rosarians is recommended.

## AMOUNT OF LIMESTONE REQUIRED TO RAISE pH TO 6.5 FOR SOILS OF THE NORTH AND CENTRAL STATES POUNDS PER 100 SQ. FT.

	SAND	SANDY LOAM	LOAM	SILT LOAM	CLAY LOAM
<b>PRESENT pH 4.5</b>					
U.S.D.A. 1957	5.5	10.0	14.5	18.5	22.0
U.S.D.A. 1959	4.5	10.0	13.0	16.0	19.0
Sudsbury	7.0	9.2	13.8	(-----16.2-----)	
United Nations	18.6	28.2	(-----65.8-----)		
Jackson	(-----23.0-----)		(-----32.0-----)		
Organic Garden	6.0	10.0	14.0	----	16.0
<b>PRESENT pH 5.5</b>					
U.S.D.A. 1957	3.0	5.5	8.5	10.5	12.0
U.S.D.A. 1959	2.0	3.2	5.0	6.0	8.0
Sudsbury	3.5	4.6	6.9	(-----8.1-----)	
United Nations	9.3	13.0	(-----27.8-----)		
Jackson	(-----9.0-----)		(-----14.0-----)		
Organic Garden	3.0	5.0	7.0		8.0

## CALCIUM CARBONATE EQUIVALENT FOR CERTAIN MATERIALS LBS. LIMESTONE REQUIRED PER 100 LBS. OF MATERIAL. ( - INDICATED MATERIAL IS BASIC)

INORGANIC	LBS/C	ORGANIC	LBS/C
Ammonium Nitrate (33.5%)	59	Fish Meal (9.5%N)	5
Ammonium Sulfate (21%N)	110	Guano (Peruvian) (13%N)	13
Calcium Nitrate (15%N)	- 20	Activated Sludge (6%N)	1
Sodium Nitrate (16%N)	- 29	Cottonseed Meal (7%N)	10
Urea (46%N)	84	Bone Meal (33%Ca)	- 20
Urea-form (38%N)	68	Dried Blood (13%N)	23

*Continued on page 24*

## ROBERT'S RULES OF ROSES

*Continued from page 23*

Reproduced below is the feeding program of Cliff Cleage for the Cheekwood Garden. Note how closely it blends with the experience of Monty Justice in the Louisville area.

"To a great extent, the number of bushes you have should always dictate your feeding program. If I had 25 bushes or less, I would pamper them to death — but carefully!!! I would feed them one-half feedings of water soluble fertilizer three weeks per month. The fourth week I would feed them organics — fish emulsion, epsom salts, sequestrine mixed in a 20-gallon garbage can at the following rates: 40 tablespoons fish emulsion, 20 teaspoons sequestrine, 40 tablespoons epsom salts. Fill can with water and give each bush one gallon. (ONLY FEED EPSOM SALTS TWO TIMES DURING THE YEAR). Dolemite lime and either alfalfa meal or fishmeal should be fed at a rate of one cup per bush two more times per year.

Some would opt for a much simpler and less busy program such as using a good granular fertilizer the first of each month and doing some of the other things at mid-month. It simply depends upon how much time you care to spend and how much time you have. For larger gardens, a fair amount of jurisprudence is needed due to the physical limitations of the caretaker.

The Cheekwood Rose Garden will have about 350 bushes this year. I will carry you step-by-step through the feeding program the Nashville Rose Society will use this year:

---

April 1st — 2 tablespoons calcium nitrate and 1 cup dolemite lime per bush.

April 15th - 2 tablespoons per gallon water of fish emulsion and epsom salts.

May 1st - monthly feeding of granular fertilizer (fertilome), alfalfa meal 1 cup.

May 15th - fish emulsion and *Sequestrine* fed in the 1 gallon mix.

June 1st - monthly feeding of granular fertilizer plus 1 cup dolemite lime.

July 15th - monthly feeding of granular fertilizer plus 1 cup dolemite lime.

August 1st - monthly feeding of granular fertilizer - 1 cup of fish or alfalfa meal.

August 15th - fish emulsion, epsom salts, *Sequestrine* fed in gallon mixture.

September 1st - feed only if you plan to exhibit in late September or October. If you do feed, use water soluble fertilizer such as *Peters*, *Miracle-Gro*, or *K-Gro*. Use something that will flush through rather rapidly so as not to have new growth starting as winter approaches."

---

Compare your practices with the above to see how you measure up. I am still trying to get my rose beds to say "swoosh" instead of "swish" when I water.