

Fertilizing: A Step-by-Step Guide

We grow roses for their beautiful blossoms. But for a rose plant to achieve its full blooming potential, it needs to be fed. This step-by-step guide outlines a basic feeding program that will help ensure that your roses get what they need to provide you with the show of blossoms that you want.

We go into a lot of detail here, but don't be confused or intimidated by it. It's not rocket science. Feeding your roses follows some basic common sense principles that most gardeners figure out pretty quickly. If you provide the basics that a rose needs -- sun, water and fertile soil -- it will pretty much be just fine. Then, learn to "pay attention" to your plants so you can see when something is not right. If for some reason your rose suddenly looks different and isn't as green and healthy as you'd like, then there's probably something that it needs.

This article explains how to give your roses the food they need to be healthy, productive plants. But, for those of you who want a quick answer, here's the bare-bones guide to fertilizing:

1. Give each rose 2 cups of a well-balanced, natural-based or organic granular fertilizer in the spring. Sprinkle onto the soil surface around the base of the plant. Additional amendments that can be fed include: 1/4 cup of epsom salts, 2 cups of alfalfa, 1/2 cup of rock phosphate or bone meal, and a shovelfull of compost.
2. Optional summer feeding: One month after the first feeding, give each rose a dose (about one gallon of solution per rose) of an organic liquid fertilizer, such as fish emulsion. Apply this each month during the summer up until 6 weeks before the first frost.
3. Don't use Miracle Grow type liquid chemical fertilizers on Rugosa roses. It burns them right up.

In a nutshell, that's your quick guide to fertilizing your roses. See, it's not that difficult. If you want to know more details or have some questions about what, why and how, then read on. We've got five easy steps that guide you through the "how to fertilize your rose" process, including where to find good, organic fertilizers.

Step 1: Understanding Fertilizer - What is it?

The basic ingredients in well-balanced fertilizers are nitrogen, phosphorous and potassium (NPK). These are listed as numbers on fertilizers labels; for example, 10-15-10. NPK are the building blocks of life for plants. Nitrogen promotes new, green growth; phosphorous helps with root growth, photosynthesis and flower production; and potassium helps to strengthen canes, improve vigor and increase winter hardiness. We recommend using slow-release, natural-based or organic fertilizers to prevent "burning" your roses. Many nonorganic fertilizers with high nutrient content (such as,

20-20-20) can be too much for your roses and cause the leaf tips to "burn" and turn brown, or cause the leaves to fall off completely.

Step 2: Selecting Fertilizers --What to Use

Our list of recommended fertilizers includes:

1. **An all-purpose, granular, natural-based or organic fertilizer** with a balanced nutrient ratio in the single digits. This fertilizer provides the basic NPK necessary for plant growth and bloom. There are many acceptable brands available.
2. **Bone meal or rock phosphate.** Provides phosphorus, which helps promote blooms and root growth.
3. **Fish/kelp liquid fertilizer.** Fish provides a nitrogen source and kelp adds necessary trace minerals.
4. **Alfalfa (meal, pellets or tea).** Alfalfa contains triconatol, which promotes plant growth. Alfalfa also conditions the soil.
5. **Epsom salts** (magnesium sulphate). Promotes enzyme activity in the soil, and vigorous growth. Can also green up leaves.
6. **Compost.** Feeds the soil by adding organic matter and basic nutrients, which in turn improves the soil and feeds soil life. Healthy soil makes for healthy plants.

What Type of Fertilizer You Should *Not* Use:

One fertilizer that we absolutely **do not** recommend is liquid chemical fertilizers like Miracle Gro -- particularly on Rugosa roses. If you do, you stand a very good chance of burning up the plant. Rugosas are the toughest roses we grow, but they just can't handle the high nitrogen and chemicals salts in Miracle Grow type fertilizers. If you don't believe us, just go ahead and apply it to the leaves or around the base of a Rugosa plant. You won't have to wait more than a day before the leaves turn yellow and crispy. Then, you'll believe us and start using compost instead.

Step 3: Feeding Schedule -- When to Fertilizer

A. First Feeding in Spring:

As soon as spring arrives and you can dig in the soil a bit (mid to late April in Zone 4), give your roses their first feeding of granular fertilizer. Gently pull back the mulch around the base of the rose and sprinkle the fertilizers listed below onto the soil surface in a circle around the plant.

1. For each plant apply 2 cups of a granular, all purpose, natural-based or organic fertilizer.
2. Additional amendments that can be fed include:
 - 1/4 cup Epsom salts
 - 1/2 cup bone meal or rock phosphate
 - 2 cups alfalfa meal or pellets
 - A shovelful or two or three of compost (be generous). Apply this over the top of the other fertilizers. Compost can also serve as a mulch to help retain moisture, inhibit weeds and keep the soil surface temperature from getting too hot.

B. Optional Summer Monthly Feeding Program:

Basic rule of thumb: Always thoroughly water the soil around the rose before applying liquid fertilizers. This helps prevent fertilizer burn. Avoid using liquid chemical fertilizers -- just use liquid fish, or compost or alfalfa tea.

About one month after the first feeding in spring (around mid May to early June in Zone 4), apply a gallon per rose of one of the liquid fertilizers listed below.

- Fish/kelp liquid fertilizer. Apply at rates recommended on the fertilizer container, usually two tablespoons of fertilizer to one gallon of water. Sprinkle the liquid around the base of the plant.
- or -
- Alfalfa or manure tea. To make the tea, add 12 cups of alfalfa meal or pellets, or about 10 pounds of manure to a 32-gallon garbage can filled with water. Keep covered and let it steep for 2-3 days. Stir once each day for a week (be sure to return the cover). Then its ready to use.

Apply liquid fertilizer once a month throughout the growing season, making sure to stop feeding at least six weeks before the first frost (about mid August in Zone 4). This helps your roses "harden off" for winter by reducing or eliminating new, tender growth that can be damaged by frost.

Step 4: Fixing Problems

Sometimes you may provide all the right nutrients, but your roses still aren't blooming as well as you had hoped or their leaves may not be as green as they should be. First, you need to know that in addition to NPK, roses also need calcium, iron, magnesium,

sulphur and other micronutrients. The most important of these are iron and magnesium. All these nutrients are usually available in most soils.

If your rose is showing signs of chlorosis, or yellowing, the first thing to do is have your soil pH checked. It should be neutral; between 6.5 and 7.0. A neutral soil pH makes the nutrients, especially iron, more readily available to the plants. If the soil is too acid or alkaline, it binds the iron, making it unavailable to the plant. This may cause the chlorosis or other problems. If the pH is acid, add lime; if it is alkaline, add sulphur.

Cold soil temperatures can sometimes slow the movement of nutrients in the soil-- especially in the spring. If the leaves of your roses are not as green as they should be in the spring, it could be caused by cold soil. Give the plants a drink of fish/kelp fertilizer to help provide the nitrogen necessary to green-up the leaves.

Basic Rule of Thumb: To fix problems, you need to remember to FEED YOUR SOIL. This is the most important part of a good fertilizer program. The best way to do this is through adding compost and using organic fertilizers. If your soil is healthy and well fed, it will be able to provide your plants with all the food they need to be healthy and produce spectacular shows of blossoms.

Step 5: Purchasing Fertilizers

Now that you know how to fertilize, the obvious question is where to find the fertilizers we recommend. Most garden centers carry some form of organic or natural-based fertilizer and there are many good brands available. Just make sure that NPK are available in adequate levels (at least 2-5-2). Feed mills or farmers coops are good, inexpensive sources of bone meal and alfalfa meal.