Fertilizing, Pruning, and Winterizing Roses

With the abundance of information available on roses and rose care, there is still some mystery about proper care and maintenance. For every different type of rose, there is probably a gardener with a different approach to their care. It is as much of an art as it is a science to grow beautiful roses, but the following information will give some important basics to help demystify the process.

**Fertilizing**
Because roses are heavy feeders, a routine fertilization program is important for plant health and vigor. Roses grow best in the pH range of 5.5 to 7.0. Soils testing below 5.5 will need an amendment of dolomitic lime, 7 to 8 pounds per 100 square feet, to raise the pH into the desired range. Powdered sulfur can be used to lower the pH. For soils with a pH between 7 and 7.5, add 1 pound of sulfur per 100 square feet; for a pH between 8 and 8.5, add 2 pounds of sulfur per 100 square feet; and for soil with a pH over 8.5, add 3 pounds of sulfur per 100 square feet. Ohio soils are often deficient in iron when the pH is above 6.5. Iron sulfate can be used instead of powdered sulfur to decrease the pH and provide the needed nutrient.

Soil texture, which is the relative percentage of sand, silt, and clay composing soil, will influence the amount and frequency of fertilizer application.

It is always a good idea to amend your soil with organic matter, such as humus, peat moss, manure, or composted sewage sludge for an added source of slow release nutrients. The addition of organic matter will also improve the soil’s drainage and nutrient holding capacity. It is recommended that 2 to 4 inches of organic matter be added and worked into new beds to a depth of 12 inches. Many gardeners find the combination of organic materials and a fast release, complete, inorganic fertilizer, such as a 5-10-5, 10-10-10 or 12-12-12, works best to produce beautiful roses.

In general, roses do well with an application of 3 pounds of nitrogen per 1000 square feet (or 0.3 pounds of nitrogen per 100 square feet), divided into 3 applications per year. To calculate how much fertilizer to apply depending on the formulation, use the following example.

**Pruning**
Basically, pruning is done to improve the appearance of the plant, to remove dead or diseased wood, to let in sunlight and air to the center of the plant, and to control the quantity and quality of the flowers produced. Deadheading, or the removal of spent blooms during the season, encourages more blooms (on continuous blooming varieties), improves the appearance of the plant, and removes potential harboring sites for disease organisms.

Prune rose bushes to a uniform height, between 12 and 24 inches; remove suckers below the soil line. In general, roses should be pruned just before growth begins in March or early April. The exceptions are old (heirloom) roses and some climbers that produce blooms on the previous year’s wood. They should be pruned after they bloom.
Following a logical sequence of steps while pruning will help make the job seem less complicated. The first step is to remove any dead, diseased, or damaged wood. Cut the stems 1 inch below darkened areas, making sure you are cutting back to green wood. Make the cut at a 45° angle about ¼ inch above an outward facing bud. Inspect the pith (center of the stem); it should be white. If tan colored, continue pruning sections of the stem until the pith is white.

The second step is to remove branches growing toward the center of the plant. This opens up the plant for better air circulation and allows sunlight to penetrate the inner portion.

The third step is to locate crossing branches and remove the weakest one. Crossing branches may rub against each other, causing abrasions that may serve as openings for disease organisms to enter the plant. Remove sucker growth, which is growth coming from below the bud union. Sucker growth is from the root stock and is a different rose variety; if not removed, sucker growth will crowd out the desired variety.

Finally, prune to shape the plant. Hybrid teas, grandifloras, and floribundas can be pruned 12 to 24 inches in height, leaving up to 9 to 12 large (½ inch diameter), healthy canes. Old, shrub and species roses should be pruned lightly, removing no more than ⅓ of the growth. Miniature roses need only minimal pruning.

**Pruning Rambling and Climbing Roses**
The procedures for pruning Rambling and Climbing roses will vary depending on the type of rose it is. A pruning basic that remains constant, though, is removing dead, diseased, or damaged wood whenever noticed. This improves the appearance of the rose.

**Deadheading Roses**
Removal of spent blooms, called "deadheading," is an important summer maintenance practice for roses, especially the continuous blooming varieties. To deadhead, remove the flower by cutting back, at a 45° angle, to the first outward facing bud in the axil of a leaf with 5 leaflets. The continuous blooming climbing rose is deadheaded a little differently. Remove the spent blooms just above the foliage, making sure not to remove any of the foliage since new blooms will be produced from the leaves immediately below old flower clusters.

**Winter Protection**
Winterizing roses is a very important maintenance practice to ensure vigorous growth from year to year. There are several things you can do to make sure your roses survive Ohio winters long before the cold winds. First, choose the most winter hardy roses available to plant in your rose bed. Next, make sure your roses are healthy and not under stress because they have a better chance of surviving winter than weak plants. Reduce stress on roses going into the dormant season by irrigating adequately in late fall and discontinuing nitrogen application in late summer or early fall.

*Source: OSU Ext. Cindy Welyczkowsky & Jane Martin*