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ROSES
Care After Planting

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Roses are popular garden plants because of their beautiful, fragrant flowers. However, even if roses are carefully selected and planted, they will produce few flowers unless certain cultural practices are completed during the growing season. Pruning, fertilizing, watering, and pest control are important tasks that a gardener must undertake. If roses are properly maintained, the resulting healthy plants will add beauty to the landscape.

Pruning

Yearly pruning is required to maintain the size and vigor of bush roses. The objectives of pruning are simply to promote a symmetrical bush, to encourage new growth, and to remove dead or damaged wood. Pruning in the spring, rather than the fall, will produce more flowers from hybrid teas, floribundas, polyanthas, grandifloras, climbing hybrid teas, and large flowered climbers that bloom more than once during the year. Other climbing roses like the ramblers and the large flowered climbers that have only one flowering period should be pruned immediately after flowering to avoid cutting off next year's flowering wood.

Spring pruning should be done when Forsythia are in bloom. If you wait until all danger of frost is past, you will remove too much new growth and reduce the amount of the first bloom.

Consider your intended use of the roses before you actually prune the plants. For example, if you are growing roses for exhibition, you will prune them differently. The rose exhibitor desires only a few large, perfect blooms, while the homeowner may want to force as much bloom as possible on a plant. Also, give some thought to your overall landscape. The ultimate height of the rose plants will be determined by the background plants and the general landscape effect desired.

Because of the severity of winters in Idaho, exposed rose canes are frequently damaged, so prune to remove all dead or damaged wood. A cane may be green on the outside, but if the center is brown, it is damaged. Prune all stems and canes back to wood that is light green to creamy white in the center.

After pruning out winter-damaged canes, remove any canes that are broken and those injured by insects or diseases. Next, remove canes that rub against other canes and those that are spindly and weak or old and unproductive. After pruning according to these general recommendations, cut the remaining canes of hybrid teas, floribundas, and grandifloras 18 to 24 inches high, or to a height that is in balance with the rest of the rose bed (Fig. 1). Pruning lower than 1 to 2 feet is not recommended for Tropicana, Peace, and the mauve or purple varieties of roses because they eventually weaken and die.

Climbing roses are not pruned for the first 2 to 3 years but afterwards they are pruned according to these same guidelines, except the canes are left long. From these long

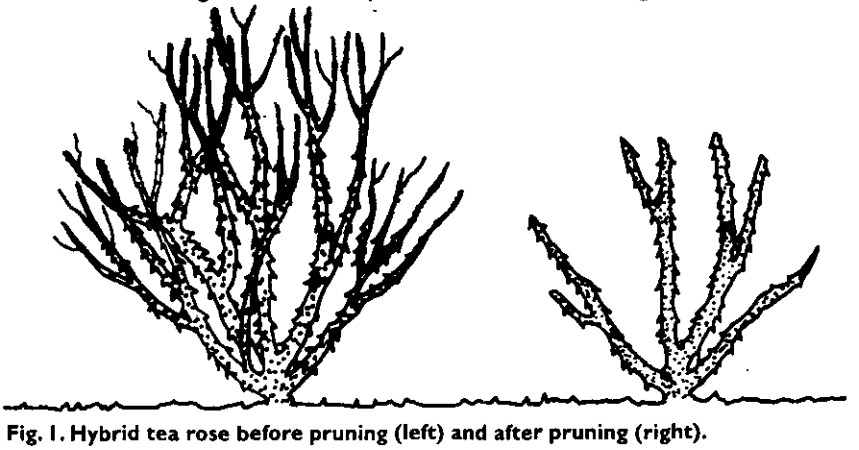

Fig. 1. Hybrid tea rose before pruning (left) and after pruning (right).

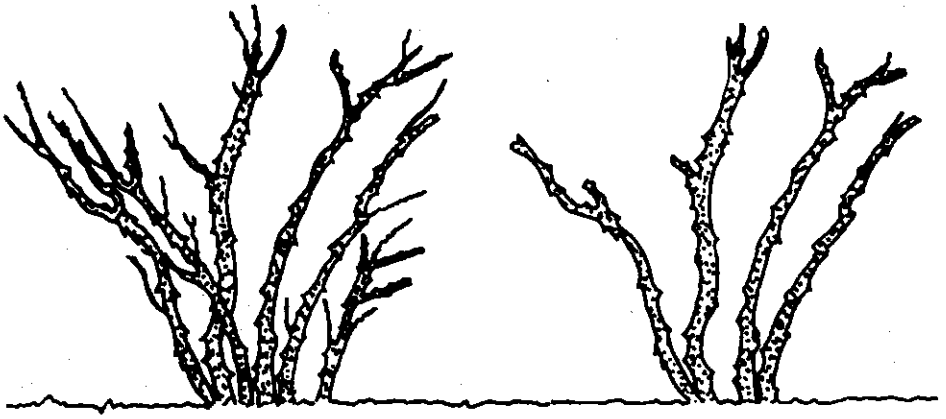

Fig. 2. Climbing rose bush before pruning (left) and after pruning (right).

canes will come side branches (laterals) that will bear the flowers. Your pruning objectives are twofold: (1) to encourage growth of more flowering laterals, and (2) to stimulate production of new canes to gradually replace the oldest and less productive ones.

Take out old wood only if it is unproductive by pruning it off near ground level (Fig. 2). Laterals that bore flowers during the last year should be cut back to two to three buds.

The best blooms are produced on laterals growing from 2- or 3-year-old wood. Ramblers differ from climbing hybrid teas and large-flowered climbers in that their flowers are borne exclusively on new canes.

The canes of climbers can become quite long. Some varieties produce most of their new flowering wood higher up on the plants, however, so leave the long canes alone unless they grow too long for the allotted space. For best results with a climber, allow plenty of space for it to grow with some form of support.

When pruning roses, be sure to use a sharp pair of pruning shears. The cuts should be clean and not torn. Make all cuts at a 45° angle just above an existing bud.

Cutting Roses

One reason for growing roses is for use as indoor cut flowers, but don't be in a hurry with young plants. New plants need at least a year to become well established in your garden. Wait until their second season before using them as cut flower sources. If plants are new or weak, cut only flowers with short stems to leave as much foliage on the plant as possible.

Even after plants are well established, cut the stems no longer than needed because the foliage is important for later growth and flower production. When cutting blossoms leave at least two sets of 5-leaflet leaves on the stem (Fig. 3). Use a sharp knife or hand pruners to remove flowers.

If you do not cut the flowers for indoor display, remove the blossom as soon as the petals fade. Cut just above the topmost leaf or to the first 5-leaflet leaf that points away from the bush's center (Fig. 4). Removing spent flowers will help force new growth more quickly and prevent the plant from using its energy to produce seeds.

Disbudding

Large, single-stem flowers such as hybrid teas can be grown for exhibition or display by disbudding. To disbud, remove all but the terminal (main tip) flower buds on each stem. Rub or pinch off side buds as soon as they appear. The terminal bud then develops into a much larger flower. Even roses that bear many flowers per stem can be improved by removing some of the buds.

Fertilization

When new spring growth is well established and all danger of frost is past, apply a complete fertilizer to your roses. Use either inorganic or organic fertilizers. A combination of both often provides best results.

Inorganic Materials

Complete inorganic fertilizers that are often used on the vegetable garden are convenient and easy

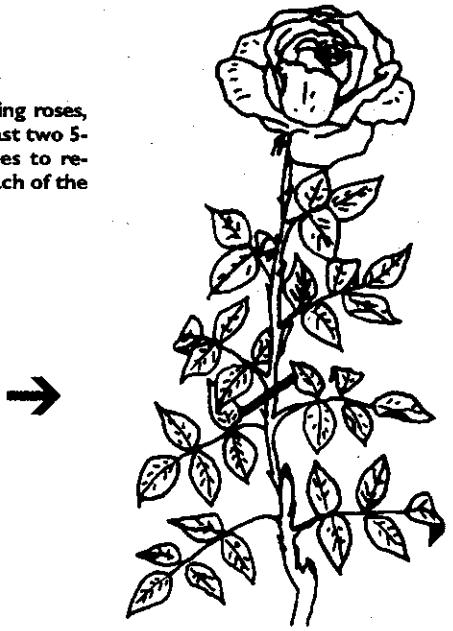

Fig. 3. When cutting roses, allow at least two 5-leaflet leaves to remain on each of the shoots.

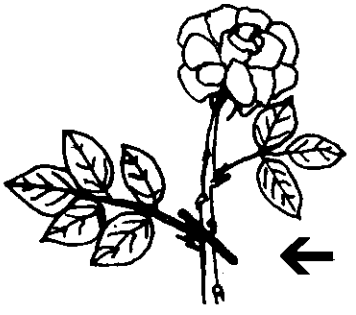

Fig. 4. Remove rose flowers as soon as the petals fade and before they shatter. Make a cut 1/4-inch above the first 5-leaflet leaf.

to use for roses. The nutrient content of a fertilizer is indicated on the label, usually in three numbers. The first number always indicates the percentage of nitrogen in the fertilizer; the second, phosphorus; the third, potash (potassium). Thus, a 5-10-5 fertilizer contains 5 percent nitrogen, 10 percent phosphorus, and 5 percent potash.

Roses need a higher percentage of phosphorus than the other two nutrients. Therefore, analyses such as 5-10-5 or 4-8-4 are good maintenance fertilizers for roses. If you are unable to find fertilizers with those analyses, you can use a mix such as 8-8-8 or 12-12-12.

When using a complete fertilizer, apply about 3 pounds per 100 square feet or 1 heaping tablespoonful per plant, unless recommended otherwise on the package.

Organic Materials

Manure is excellent for a mulch or for incorporating into the soil. Use only aged manure since there is always a chance of burn from fresh manure. All types of manure add organic matter and improve soil structure.

Liquid fish fertilizers are a source of rapidly available nitrogen. Follow the manufacturer's directions on the label when applying this product. The strong fishy smell of these materials may be objectionable.

Bone meal is a valuable source of slow-acting and long-lasting phosphorus. You can place it in the hole at planting time or mix it into the soil surface since it does not readily move with water. Use about 1 heaping tablespoonful per plant.

Blood meal is a source of organic nitrogen. Use it carefully since an excess amount can burn roots. Generally, 1 level tablespoonful applied around each plant is adequate.

Shallowly work the fertilizer into the soil around the plant and water it in. To prevent burns, do not place fertilizer against plant stems. Make additional applications of fertilizer every 6 weeks. Do not apply high nitrogen content fertilizer after July. Reducing fertility in late summer will help plants harden off for winter.

Roses grow best in soil that is slightly acid (pH 6.0 to 6.5). To determine whether the acidity of your soil is within the best range for roses, have the soil tested every few years.

Weed Control—Mulching

Keep a vegetation-free circle at least 36 inches in diameter around the base of each rose plant. If you choose to cultivate to remove weeds, avoid deep cultivation that injures roots near the surface. Prevent lawn grass from invading the rose beds with a barrier of concrete, metal, or wood edging.

Some herbicides are registered for use in rose beds to control weeds. Read product labels carefully and follow application directions to avoid herbicide injury to your roses.

Using a mulch will help control weeds, conserve moisture, and add fertility and organic matter. Make the mulch 2 to 3 inches deep. Keep the mulch about 6 inches away from the base of the plant. This open area will form a basin to aid in watering. If you use peat moss as the mulch, be sure to water it thoroughly before application. You can use sawdust if you mix 1 pint of ammonium nitrate (33-0-0 fertilizer) with each bushel of sawdust.

Other high nitrogen fertilizers can be used as well, but first check application rates with your Extension educator. This additional fertilizer is needed to prevent depletion of the soil nitrogen as the sawdust decomposes. Mulches may be renewed each spring if needed. Do not use a plastic as a mulch on roses because it cuts down on the oxygen and water available to the root system.

Watering

Roses grow best when they have abundant moisture and good drainage. Soil around the roots should always be moist but never waterlogged. Add water when the soil becomes dry in the upper 1 to 2 inches.

Thorough, deep watering is important. Apply water slowly enough to prevent surface run-off and long enough to attain deep soil penetration. Until you become familiar with your soil and watering technique, dig into the bed 1 hour after watering to see how deep the water has penetrated. After each watering, soil should be wet at least to a depth of 1 foot. Water in the morning so that foliage will be dry by evening. This will help reduce fungal disease problems. An occasional watering during a dry winter may be necessary to help plants survive.

Winter Protection

More winter injury results from sudden, rapid, or frequent temperature change than from low temperature itself. Many of the old-fashioned shrub and rambler roses are hardy and need little or no winter protection. Hybrid tea, floribunda, grandiflora, and climbing hybrid tea roses may be injured during severe winters, however, so they need some protection to ensure their survival. Plants in locations protected from wind will need less winter protection than plants in exposed areas.

The best form of winter protection is to mound up soil around the base of each plant to a height of 10 to 12 inches (Fig. 5). This will protect the graft union and the base of the

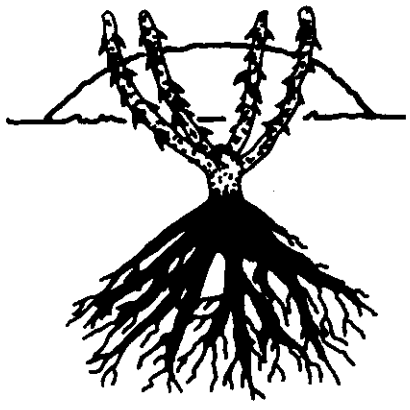

Fig. 5. Protect roses in winter with a mound of soil 10 to 12 inches deep. Tender varieties may benefit from a layer of straw or evergreens over the soil mound.

canes. Make sure the soil is loose and friable (crumbly) and that it drains well. Bring the soil from another location in the garden. If you scrape it from between the plants, you may injure the roots.

You can use loose, well-decomposed compost or aged sawdust instead of soil. Do not use leaves, grass clippings, manure, or materials that would remain wet or rot around the canes and promote disease. Evergreen branches or straw placed over the soil mound will give additional protection to the canes. Wait until temperatures drop and remain fairly constant in a range of 15° to 25°F before covering the canes. The purpose of winter protection is to keep roses cold, not warm, and to prevent desiccation.

Pest Control

Many insects and diseases attack roses, but few are serious. The key to good control is to identify the pest correctly. Most pests can be controlled with a pesticide, but pesticides alone are not the only factor to consider in developing a pest control program. An effective pest control program includes good cultural practices that will ensure healthy plants and at the same time reduce conditions that encourage pests.

Plants must be established in locations where they can thrive. Water, fertilizer, and pruning must be adequate. A plant under stress will often be the first to fall victim to pests. Beds should be kept free of weeds, old leaves, and other plant debris that could serve as sources of inoculum or hiding places and egg laying sites for insects.

If plants are overcrowded or watered late in the day, the resulting high humidity around the plants can make them more susceptible to diseases. The likelihood of success with a pest control program is greatly increased when both direct and indirect control measures are used.

Insects

Aphids are the most common insect pests of roses. Sometimes called "plant lice," aphids are soft-bodied, green, brown, or reddish insects. They are usually abundant on soft growing tips and on the stem immediately below the flower buds. Severe infestations may deform the leaves, stems, or buds.

Several good insecticides are available for aphid control. Begin spraying as soon as the insects are noticed in early spring. Summer infestations are usually not severe if these pests are controlled in the spring.

Red spider mites are less common than aphids but, when present, are often difficult to detect and control. Mites are tiny and hardly visible to the naked eye. Tiny webs between the veins on the lower sides of leaves indicate their presence. As mites feed, the leaves become yellow and can have a stippled appearance. Tapping the leaves sharply above a piece of white paper will dislodge a few of the pests for easier viewing. Mites are most serious in hot, dry weather.

When mites are present, an effective miticide must be applied frequently. Spraying about every 4 days will be necessary to eliminate severe infestations. Mite populations can be reduced by spraying the plant foliage daily with a strong stream of water. The spray washes mites off and reduces the dry conditions that they thrive on.

Many other leaf- or flower-chewing insects such as earwigs attack roses. They are not serious pests and can easily be controlled by using an effective insecticide. Such pests can be identified by the holes and irregular cuts they make in leaves or petals.

Diseases

Powdery mildew is the most serious disease affecting roses in Idaho. This fungal disease is characterized by gray to white powdery masses of spores that appear on young leaves, shoots, and buds. Leaves and young shoots may become crumpled and distorted. Serious infection causes leaves to dry and fall, and flower buds fail to open properly.

Powdery mildew is widespread from late spring to early fall. Mild temperatures and high humidity favor the disease. The spores are spread by wind with the disease overwintering on fallen leaves, flower stems, and in infected bud scales. Powdery mildew can be controlled with fungicides like sulfur, but planting resistant cultivars also helps.

Overcrowded plantings in damp or shady gardens are subject to more severe attacks of powdery mildew than are roses in sunny beds where there is free air circulation through and between plants.

Additional Recommended Reading

Two other new University of Idaho publications discuss other phases of raising roses in Idaho gardens. Also available at Extension county offices throughout the state are:

CIS 794 Roses: Types, Selection and Environmental Requirements for Idaho Gardens

CIS 795 Roses: Buying and Planting

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