

ROSES

ROBERT G. ASKEW
Extension Horticulturist

NEAL HOLLAND
Professor of Horticulture
Agricultural Experiment Station

**COOPERATIVE
EXTENSION
SERVICE** 
North Dakota State University Fargo, North Dakota 58105

THE MOST POPULAR ROSES GROWN — hybrid teas, grandifloras and floribundas — are not fully hardy in northern areas. Short, hot summers and long, cold winters mean that more care is necessary, but these quality roses can be grown in North Dakota.

Choosing a good location for your rose bed is important. Roses should have a minimum of one-half day's sun, but will do better with two-thirds to full sun. A little shade in the heat of the afternoon helps prolong the life of the blooms. Roses should be grown in good garden soils. The addition of organic matter, such as peat or well-rotted manure, will improve the growth and vigor. Choose an area of well-drained soil. Roses won't withstand wet, soggy soil.

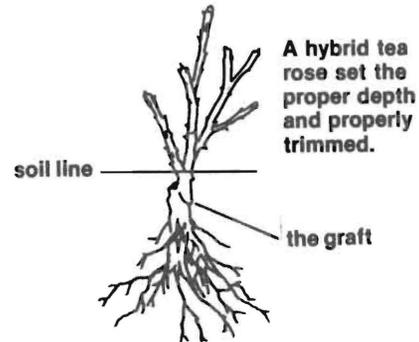
When to plant roses may depend upon whether you buy bareroot dormant bushes or potted plants that are already growing and sometimes even in bloom. Plant dormant bushes early, before trees and shrubs leaf out in the spring or at least by early May. Do not plant growing potted roses that were started in a greenhouse until danger of severe frost is past, that is, late May or early June. When planting dormant, bareroot roses, trim the broken ends of the roots to provide a nice clean cut. Preserve as much of the root system as possible.

How you plant roses is vitally important for winter survival. Dig a hole large enough to hold the entire root system of either potted or bareroot plants without crowding, and deep enough so that the graft (a distinct knobby joint on the stem between the branches and the roots — see the drawing) is 1½ to 2 inches below the soil surface. Planting at this depth is very important in cold climates regardless of other instructions you may have read.

Place the plant carefully in position and put loose, friable soil around the roots and firm with your hands. Loose, friable soil may be firmed with your feet if the soil is not wet. Water well. If plants are dormant, mound up loose soil to a height of 10 to 12 inches above the normal ground level to protect the stems from frost and drying. Do not remove this mound of soil until the plant is growing

vigorously. Rains and hoeing will gradually level the soil mound during May and June.

The nursery usually has pruned the bushes you buy. If not, shorten all the canes of bareroot plants to 8 to 12 inches and cleanly cut off broken stems and any thin, weak branches. On over-wintered bushes of hybrid tea, grandifloras and floribunda roses, remove all dead wood (detected by dark or obviously discolored bark) as well as broken or weak branches. Make each cut ½ inch above a live, healthy leaf bud on the outside of the bush to make your plant broader and without crowded stems.



When removing spent blooms or using the roses as cut flowers, cut the stems down to ½ inch above the first leaf that has five leaflets. Shoots arising from the bud in the axil of the five-leaflet leaf will be more likely to flower than shoots from the buds in the axils of one- or three-leaflet leaves.

Summer watering is important if you expect your roses to continue blooming when rainfall is insufficient. Roses require about 1 inch of water each week. All hybrid tea, grandiflora and floribunda roses are capable of repeated bloom with proper care. To avoid damage to the flowers and splashing of disease spores from the ground to foliage, most rose growers prefer to water by soaking only the soil rather than overhead sprinkling.

Proper fertilization will help the plants produce more and larger blooms and will shorten the rest periods between flurries of bloom. Complete fertilizers, such as 5-10-5, 10-20-10 or a commercially prepared rose food, are all satisfactory. Fertilizers are best applied in early spring (late April) and again when the plants approach their peak flowering (mid to late June). Stop fertilizing by August so that your rose bushes will have a chance to slow their growth and mature tissues before winter. Most lawn fertilizers contain too much nitrogen and should not be used for roses.

Chlorosis (an unnaturally early or midseason yellowing of the foliage with the veins usually staying darker green) is most often due to an iron shortage caused by poor drainage or excess lime in the soil. Avoid such sites or build up your rose bed to improve surface drainage. Acid peat mixed with soil at planting time will counteract some of the excess lime. Finally, you may wish to consider applying one of the chelated irons (Versenol or Sequestrene 338) according to the manufacturer's directions.

Insect pests include the rose curculio (a reddish-brown "snout-beetle" that causes dried-up buds), leaf cutter bee (it cuts circular pieces from the leaves), aphids (plant lice), and spider mites. Most all-purpose rose dusts or sprays include insecticides for control of these pests. Systemic in-

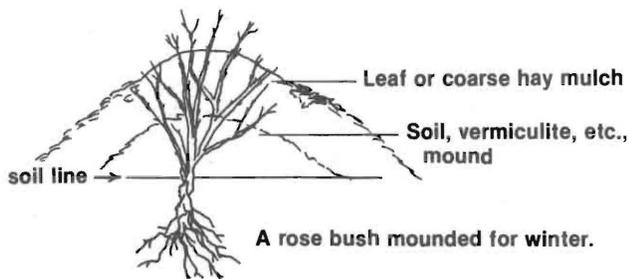
Case
5
544.3
.N9
A8
no. 118

secticides such as Di-Syston (an ingredient in many rose dusts) which can be applied to the soil at planting time should give aphid and mite control for two to five weeks. A regular program of spraying or dusting (weekly and after each rain) is best to keep these pests from getting started.

Common rose diseases include black spot, dark circular but somewhat fuzzy spots on the leaves (which later yellow and fall prematurely), and mildew, a soft gray-white film on the leaves that causes them to curl or twist slightly. Both these diseases grow most rapidly in warm, humid weather or wherever air movement (wind) is poor near your rose bed. It is important that the leaves on roses dry as soon as possible in the morning after heavy dews. Wet foliage increases disease problems. The best control is prevention through a regular program of spraying or dusting with fungicides such as those found in the all-purpose rose dusts. Weekly spraying or dusting from June until frost is recommended, as well as after periods of rain.

Winter protection is very important for all tender roses in North Dakota. Remember that most named varieties of roses are propagated by grafting the variety upon a standard rose rootstock. If the graft union is protected by deep planting, there will be a better chance for winter survival of your rose variety when it is mulched. Plant the graft 1½ to 2 inches below the normal soil surface. In some cases, the planted variety (the plant portion above the graft) winterkills followed by the growth of the rootstock in the spring. The rootstock usually grows vigorously but seldom produces any flowers. If you want the original variety, you will need to repurchase and replant again. Be sure your roses have sufficient moisture to carry them through the winter. If the fall has been dry, soak them well in late October. In early November, shorten the stems to about 18 inches. Then mound each plant 6 to 8 inches high with soil, shavings, vermiculite or sand. Next, place 10-12 inches of leaves or coarse hay on top. Use tree branches or chicken wire to keep leaves in place as well as to hold snow.

Leave the mound intact until mid-April when you take it off in stages. If you have only a few rose bushes, it may be easier to collect dry leaves in large plastic garbage bags. Store the bagged leaves until about the first of November, then merely mulch your roses by carefully placing the closed leaf-filled garbage bags tightly against each bush for mulch. Two bags will adequately protect each rose. In the spring the bagged leaves may be used for compost or hauled to a landfill. When the mounds or bagged leaves are finally removed in the spring, finish pruning by removing all dead wood (dark and discolored) as well as injured or small, weak stems. Your roses should then be ready for another season.



Many varieties of roses are available and new introductions are made each year. The following have proved popular:

HYBRID TEAS *****

- Bing Crosby—persimmon-orange
- Brandy—burnt-orange
- Charlotte Armstrong—rose red
- Chrysler Imperial—rich red
- Color Magic—deep pink
- Crimson Glory—deep red
- Double Delight—cream white, brushed with rich red
- First Prize—pink
- Fragrant Cloud—coral red
- Granada—nasturtium red
- Honor—white
- John F. Kennedy—white
- Lowell Thomas—yellow
- Mirandy—wine red
- Mon Cheri—pink and red
- New Yorker—bright red
- Pascali—white
- Peace—cream-yellow with pink blush
- Perfume Delight—pink
- Pink Peace—deep pink
- Proud Land—red
- Royal Highness—pink
- Sweet Surrender—silvery pink
- Tropicana—coral orange

GRANDIFLORAS *****

- Camelot—coral pink
- Carrousel—bright red
- Montezuma—coral-orange
- Prominent—orange
- Queen Elizabeth—medium pink
- Shreveport—orange, salmon, coral blend
- White Lightning—white

FLORIBUNDAS *****

- Charisma—red and gold bicolor
- Circus—gold-red bicolor
- Europeana—red
- Eutin—bright red
- Fashion—golden-salmon
- French Lace—white
- Garnette—small, deep-red
- Gene Boerner—rose-pink
- Ivory Fashion—clean ivory
- Marina—coral-orange
- Red Pinocchio—medium red
- Sun Flare—bright yellow
- The Fairy—light pink
- Vogue—coral

Cooperative Extension Service, North Dakota State University of Agriculture and Applied Science, and U. S. Department of Agriculture cooperating. Myron D. Johnsrud, Director, Fargo, North Dakota. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. We offer our programs and facilities to all persons regardless of race, color, sex, religion, age, national origin, or handicap; and are an equal opportunity employer.