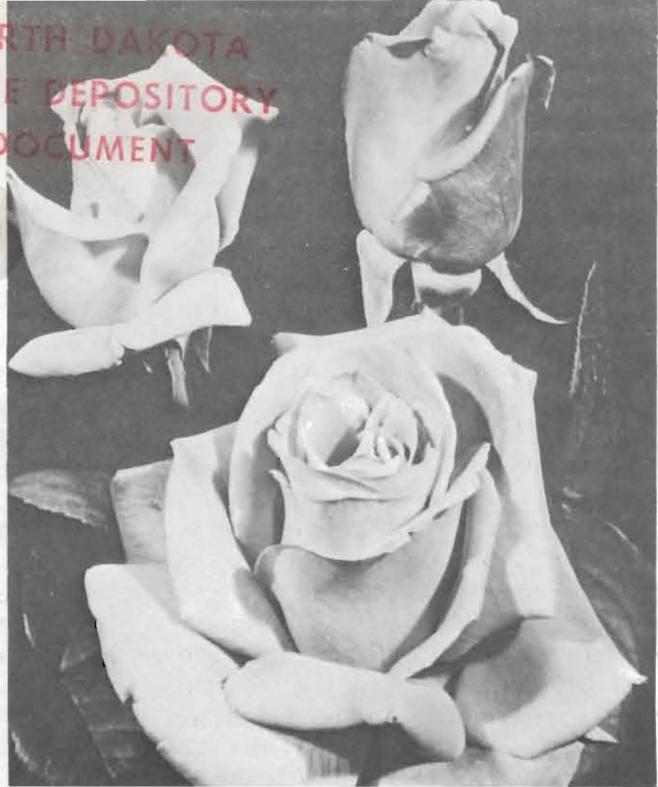


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# Roses

ROBERT G. ASKEW Extension Horticulturist  
NEAL HOLLAND Professor of Horticulture  
Agricultural Experiment Station



**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.

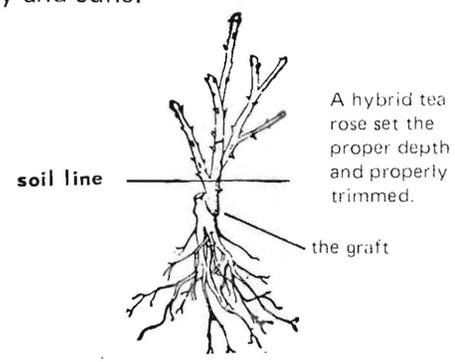
**Choosing a good location** for your rose bed is important. Roses should have a minimum of one-half day's sun, but will do better with 2/3 to full sun. A little shade in the heat of the afternoon does help prolong the life of the blooms. Roses can be grown in any good garden soil. The addition of organic matter, such as peat or well-rotted manure, will improve the growth and vigor of your roses. By all means choose an area of well-drained soil. Roses won't stand wet, soggy soil.

When you should plant your roses may depend upon whether you buy bare-root 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 and at least by early May. Do not plant potted roses, growing plants that were started in the greenhouse, until danger of severe frost is past in late May and early June.

How you plant your roses is vitally important for winter survival. Dig a hole large enough to hold the entire root system of either potted or bare-root 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 (about 4 to 5 cm) below the soil surface. Planting at this depth is very important in cold climates regardless of other instructions.

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.

With dormant plants, mound up loose, friable soil to a height of 10 to 12 inches (about 25 to 30 cm) 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 bare-root plants to 8 to 12 inches (about 20 to 30 cm) and cleanly cut off broken stems and any thin, weak branches. On over-wintered bushes of hybrid tea, grandiflora and floribunda roses, remove all dead wood (this will have dark or obviously discolored bark) as well as the broken or weak branches. Make each cut 1/2 inch (about 1 cm) above a live, healthy leaf bud on the outside of the bush to make your plant broader and without crowded stems.

Summer watering is important if you expect your roses to continue blooming when rainfall is insufficient. Roses require about 1 inch (2½ cm) 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 sprinkling.

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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.**

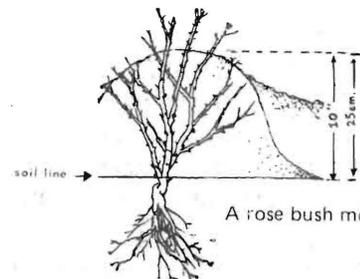
**Chlorosis** (an unnaturally early or midseason yellowing of the foliage with the veins usually staying darker green) is most often due to an iron shortage caused by poor drainage or excess lime in the soil. Avoid such sites or build up your rose bed to improve surface drainage. Acid peat mixed with 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 insecticides, 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.

**Most common rose diseases** include black spot (darkening circular, but somewhat fuzzy spots on the leaves which later yellow and fall off) 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, 4 to

5 cm, below the normal soil surface. In some cases, the planted variety (the plant top above the graft) winterkills followed by the growth of the rootstock in the spring. Many of these rootstocks grow vigorously but seldom produce 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 (46 cm). Then mound each plant 10 to 12 inches (about 25 to 30 cm) high with leaves (use branches or chicken wire to keep them in place), shavings, vermiculite or sand. You may want to top the mound with prairie hay and branches to help hold snow. Leave the mound intact until mid-April when you may take it off in stages. When the mound is 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.



A rose bush mounded for winter.

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

**HYBRID TEAS \* \* \* \* \***

- |   |                                      |
|---|--------------------------------------|
| Charlotte Armstrong - rose red                      | Mirandy - wine red                   |
| Chrysler Imperial - rich red                        | Miss All-American Beauty - pink      |
| Crimson Glory - deep red                            | New Yorker - bright red              |
| Double Delight - cream white, brushed with rich red | Pascali - white                      |
| First Prize - pink                                  | Peace - cream-yellow with pink blush |
| Fragrant Cloud - coral red                          | Perfume Delight - pink               |
| Garden Party - white with pink blush                | Pink Peace - deep pink               |
| Granada - nasturtium red                            | Proud Land - red                     |
| John F. Kennedy - white                             | Royal Highness - pink                |
| Lowell Thomas - yellow                              | Tropicana - coral orange             |
| Matterhorn - cream white                            |                                      |

**GRANDIFLORAS \* \* \* \* \***

- |                             |                               |
|-----------------------------|-------------------------------|
| Camelot - coral pink        | Montezuma - coral-orange      |
| Carrousel - bright red      | Prominent - orange            |
| El Capitan - fire red       | Queen Elizabeth - medium pink |
| Golden Girl - golden yellow |                               |

**FLORIBUNDAS \* \* \* \* \***

- |                            |                             |
|----------------------------|-----------------------------|
| Circus - gold-red bicolor  | Ivory Fashion - clean ivory |
| Europeana - red            | Red Pinocchio - medium red  |
| Eutin - bright red         | Saratoga - white            |
| Fashion - golden-salmon    | The Fairy - light pink      |
| Garnette - small, deep-red | Vogue - coral               |
| Gene Boerner - rose-pink   |                             |