

Roses

HYBRID TEAS

FLORIBUNDAS

GRANDIFLORAS



ROBERT G. ASKEW
EXTENSION HORTICULTURIST

DONALD G. HOAG
ASSOCIATE HORTICULTURIST
EXPERIMENT STATION

COOPERATIVE EXTENSION SERVICE
NORTH DAKOTA STATE UNIVERSITY
FARGO, NORTH DAKOTA 58102

CASE

S
544.3
N9
A8x
no. 118

ROSES... you can grow them in North Dakota...

THE MOST POPULARLY GROWN ROSES - hybrid teas, floribundas and grandifloras - are not fully hardy for northern areas. Short, hot summers and long, cold winters mean that you must take extra precautions, but with that extra care you can grow these beautiful roses in North Dakota.

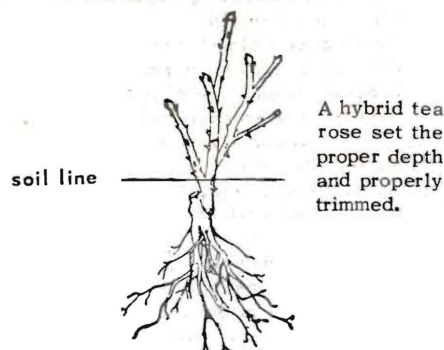
Choosing a good location for your rose bed is important. Roses should have a minimum of $\frac{1}{2}$ day's sun, but will do better with $\frac{2}{3}$ to full sun. A little shade in the heat of the afternoon does help prolong the life of the blooms. Any good soil that will grow vegetables will grow roses, but an extra helping of organic matter - peat or well-rotted manure - will benefit them. By all means choose a well-drained area. Roses won't stand wet, soggy soil.

When you should plant your roses may depend on whether you have bought 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, 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 to their welfare. Dig a hole large enough to take the entire root system of both potted or bare-root plants without crowding, and deep enough so that the graft (a knobby joint somewhere between branches and roots) is $1\frac{1}{2}$ to 2 inches below the normal 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. Water well. Then mound up loose, friable soil to a height of 10 - 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 it during May and June.



The nursery usually has pruned the bushes you buy. If not, shorten all the canes to 12 - 14 inches and cleanly cut off broken stems and any thin, weak branches. On older bushes of the hybrid tea, floribunda, grandiflora group, remove all dead wood (this will have dark or obviously discolored bark) as well as the broken or weak branches. Make each cut $\frac{1}{2}$ inch 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 rainfall is insufficient and you expect your roses to continue blooming. All good hybrid tea, floribunda and grandiflora roses are capable of repeated bloom with proper care. Most rose growers prefer to water by soaking rather than sprinkling to avoid bloom damage and splashing disease spores from ground to foliage.

Proper fertilization will help the plants produce more and larger blooms and will shorten rest periods between flurries of bloom. A complete fertilizer relatively high in phosphate but not too high in nitrogen makes a good rose food. Most lawn fertilizers are high in nitrogen and should not be used for roses (see NDSU Circular

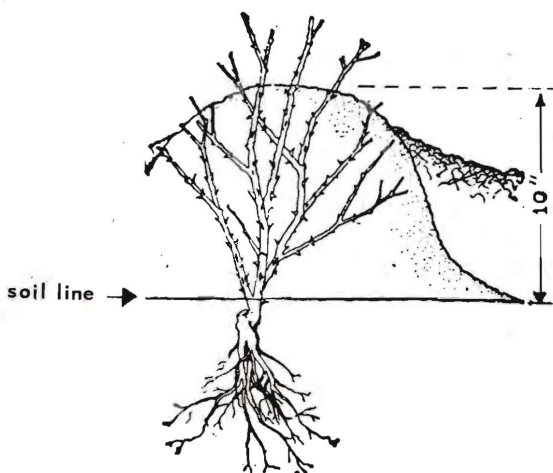
A-294, "Lawn & Garden Fertilizers"). Stop fertilizing by August so that your bushes will have a chance to slow their growth before winter.

Chlorosis (an unnatural 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 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. New systemic insecticides such as Di-Syston which can be applied to the soil at planting time should give aphid and mite control for from 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 very few breezes reach your rose bed. 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. First, 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 or early November. During this same period shorten the stems to about 18 inches. Then mound each plant 10-12 inches high with leaves (use branches or chicken wire to keep them in place), shavings, vermiculite, sand or soil, using whatever method you can to keep the material in place. 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
Chrysler - rich red
Confidence - pink blend
Crimson Glory - deep red
Fragrant Cloud - coral red
Granada - Nasturtium red
King's Ransom - yellow
Matterhorn - cream white
Mojave - rosy orange
New Yorker - bright red
Pascali - white
Peace - cream yellow, pink flush
Pink Peace - deep pink
Proud Land - bright red
John F. Kennedy - white
Royal Highness - pink
Tropicana - coral orange
White Knight - clear white

FLORIBUNDAS

Baby Blaze - rosy red
Fashion - glowing salmon
Garnette - small, deep red
Gene Boerner - rose-pink
Ginger - coral
Ivory Fashion - clean ivory
Little Darling - pink blend
Red Pinocchio - medium red
Saratoga - white
The Fairy - small light pink
Vogue - coral

GRANDIFLORA

Camelot - coral pink
Carrousel - bright red
El Capitan - fire red
Lucky Lady - pink
Montezuma - coral-orange
Queen Elizabeth - medium pink
Roundelay - dark red



Cooperative Extension Service, North Dakota State University of Agriculture and Applied Science, and U. S. Department of Agriculture cooperating. A. H. Schulz, director, Fargo, North Dakota. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914.