

THE EXTENSION LINE

From the Minnesota Extension Service

GROWING TULIPS AS PERENNIALS

Dr. Paul V. Nelson, horticultural nutritionist at North Carolina State University has found that within 48 hours after the roots come out, tulips begin to take up nutrients and never stop until after flowering. To maintain the same number of blooms the second year, the bulb must replace itself with one of equal size and, in addition, must produce several other "daughter" bulbs of smaller size. This bulb-building requires an increased accumulation of nutrients.

Although phosphorus, potassium, and calcium are necessary nutrients, nitrogen is the most important one. Fertilizing at planting (using a common fertilizer such as 8-8-8) will nourish the bulb until its stalk break through the ground.

This fertilizer should be applied again in the same amount six to eight weeks before bloom after shoots emerged from the ground but before the leaves have opened. The second application of fertilizer will carry the bulb until the tulip blooms.

The gardener who wants to fertilize only once can use a longer-lasting slow-release commercial fertilizer, applied in the fall.

After the tulip blooms, it is important not to fertilize again until fall. The bulb does not take up nutrients in the summer between flowerings and planting time, and an excess of nitrogen in the soil increases disease.

Adapted from North Carolina State University Information Services.

NEW EXPLORERS ROSES

Following are some comments and observations regarding three new hardy climbers for our area. These roses are part of the explorer Rose Series developed in Ottawa, Canada. In this case, hardy means no additional or extraordinary winter protection. They are able to remain on the trellis or other supporting structure over winter. Like other roses, they will perform best when planted in full sun. These three will be available from retail outlets Spring '89. Descriptions of the roses were provided by Mr. Terry Schwartz of Bailey Nurseries.

HENRY KELSEY Svejda, Ottawa 1976 (R. kordesii hybrid): Extremely vigorous trailing shrub which can be used as a climber. Will grow to 10 feet. Resistant to mildew and although not immune to blackspot it is seldom a

problem. Foliage is shiny deep green. Quite hardy requiring only slight pruning of tips in spring. Flowers are semi-double, deep red when opening changing to medium red as they expand. Contrasting golden stamens. Blossoms appear in large clusters from June to hard frost. Delightful delicate fragrance. The best hardy red climber we know of. We believe this will be an important new variety and recommend it highly.

JOHN CABOT Svejda, Ottawa 1978 (R. kordesii "Wulff" x "Masquerade" x R. laxa): Strongly arching pillar rose which can be used as a climber. Grows to nearly 10 feet. Foliage is exceedingly healthy and glossy medium green. Very hardy. Flowers open up a medium red and change to a deep orchid pink as they mature. Blooms throughout season. Pleasant fragrance. An award winning rose which forms an excellent climbing rose for cold areas. Highly recommended.

WILLIAM BAFFIN Svejda, Ottawa (R. kordesii hybrid): Vigorous pillar type rose which can be used as a climber. Grows to 8 - 10 feet. Foliage is glossy green and completely disease resistant. Does not kill back at our site. Flowers are semi-double, luminous pink and are borne in large clusters which appear continuously till frost. Nice fragrance. A very important new variety which will soon grace many a trellis.

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THE LONG AND SHORT OF IT

by **JOHN HALDEMAN**
Ortonville Municipal Golf Course

In the midst of a long Minnesota winter, all of us involved in golf smart thinking about the past season. As superintendent of Gem Lake Hills Golf Course, an 18 hole facility consisting of an executive nine and a par three nine, I am no different. After a stint at an 18 hole regulation course in Ortonville, I wondered what it would be like to care for a so-called "short" course. Just try to tell golfers how short it is!

There are many similarities in maintaining long and short courses, most of them obvious. Golfers are the same the world over, usually making those unreasonable demands after they've had a bad round. Mother Nature is also pretty consistent. Whether you're at the country club or the municipal, it is always too hot or too cold, too wet or too dry. And, of course, you must meet all of those unreasonable demands with a limited set of resources. I have yet to meet the superintendent who has everything