COOPERATIVE EXTENSION UNIVERSITY OF CALIFORNIA

# Flower Growing & & & L

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Summer Flowers - Tips from the Dutch

This item should have been assembled (my apology) three months ago, right when it was first released by the Flower Council of Holland. A beautiful (typical Dutch full-color) brochure listed all the summer flowers available from Holland, an attempt of course to build business in a slow period of the year. Many items can be produced in Holland during much of the summer; items that are impossible to grow in San Diego County because of warm temperatures. These include anemone, snapdragon, sweet peas, stock and peonies. Some of these items are winter flowers in California although they could be produced in Watsonville in summer, perhaps.

But there are several good items for warmer temperature summer flowers such as yarrow, various small-flowered chrysanthemum species, Amaranthus caudatus, Anethum graveolens, Aster novi-belgii, Campanula (3 or 4 species), Carthamis tinctorius, Celosia argentea "Cristata", Centaurea cyanus, Centaurea macrocephala, Chelone obliqua, Echinops ritro, Eremurus, Eryngium alpinum, Eryngium planum, Lisianthus, Helianthus, Phlox paniculata, Rudbeckia nitida, Physostegia virginiana, Saponaria, Scabiosa caucasia, Solidago and Trachlelium.

### Listen to Your Customers

A one page entitled "For the Record" by Paula F. Brownlee, from FLORIST (FTD) MAGAZINE, June 1985, asks the question of retail florists, "What are the up-and-coming flowers at your shop - and how do you introduce them?"

Four out of six retailers replied with "Dutch or European flowers"! One florist replied with "Bird of Paradise". One poor soul replied with "We don't get a lot of new things around here, so we just stick to the basics.... We don't push those fancy flowers".

From the replies to the question by these six retail florists, I interpret the following ideas:

1. The European (Dutch) flowers really are exciting to florists and consumers, like a breath of fresh air. But remember California growers, you can grow and sell anything the Dutch produce.

- 2. Birds of Paradise have been around for years, but there are still retailers that think they are great, and likely there are many consumers who still don't know a Bird of Paradise Flower. We have gluts of Birds at times, but yet the darn things still aren't well known or well distributed to florists and consumers. The same thing can be said of several other items we just take for granted here at the California production level. We've got to PUSH the system of distribution, rather than let the system PULL from us.
- 3. We are all guilty of not wanting to change and do new things, as per the poor soul above. But, what marvelous opportunities there are in this modern dynamic society, and should we deny our customers all the great new (or old) flowers available. The poor soul florist should be bypassed by a bucket stand or a supermarket!

## Fungicides for the Control of Snapdragon Rust

A recent test comparing fungicides for the control of rust disease on snapdragons was conducted by Lyle Pyeatt, Farm Advisor in Santa Clara County, Dr. Arthur H. McCain, Extension Plant Pathologist at University of California, Berkeley and Luellen Pierce, Staff Research Associate at University of California, Berkeley.

The best fungicide in this test was Plantvax (75%) used at the rate of  $1\frac{1}{2}$  lb./100 gallons of water, applied three times at  $1^{l_1}$  day intervals. Two experimental fungicides were close behind. They were Chevron XE 779 and Vangard.

### Herbicides for Flower Crops

There are many herbicides and many flower crops; thus, the situation can be downright confusing. Good growers use herbicides regularly with great success. However, herbicides can cause a lot of damage, or produce absolutely no results, if not used properly. Critical factors are rates of chemical per acre, type of formulation, method of use, timing (pre-plant, post-plant, pre-emergence, post emergence, etc.) knowing the crop tolerance, moisture, temperature, soil conditions and many others.

Clyde Elmore, our California Cooperative Extension Weed Scientist stationed at University of California, Davis, has provided some up-to-date information on herbicides for several commercial flower crops. The problem is that relatively few herbicides are actually labeled for use on many specific flower crops.

If you want to know, I can share Clyde Elmore's list of legal and potential herbicides for 25 specific flower crops. Call Seward Besemer at (619) 565-5379.

# Greenhouse Energy Use in the Netherlands

Some facts from an article in "The Grower" (British) with interpretations by Joe Hanan at Colorado State University and facts I have picked up in Holland are as follows:

Dutch glasshouse growers in 1975 paid \$1.42 per 1,000 cubic feet (approximately 1 therm) for natural gas for heating. In 1979 (when I was there) the price was about \$2.26 per 1,000 cubic feet and in 1984 it is now a whopping \$12.75. There was almost no increase in total glasshouse acreage in Holland from 1979 to 1983. Yet, gas consumption to heat the 22,000 acres of glasshouses (vegetables, flowers and potted plants) decreased from 130 billion cubic feet to 81 billion cubic feet. This is a 40 percent decrease in heating energy in 5 years. During this same period production increases also occurred. So we know the Dutch made good progress with energy use efficiency measures. This gas reduction was due not just to better insulation in glasshouses, but also using energy-efficient cultivars, using computers to control greenhouse environment, using thermal curtains, more efficient boilers with heat recovery systems and installing dual heating systems with the major portion within the crop canopy.

The present energy cost in Holland is \$1.30 per square foot of greenhouse per year. That is about twice our heating cost in southern California. The Dutch heating cost represents 18 to 25 percent of total annual production costs.

There are now about 5,000 computers on Dutch glasshouse nurseries, which means that about half of the Dutch growers are using computors for environmental control and other growing processes.

Since the depression years of 1979 to 1983, about half of the Dutch glasshouse builders have gone out of business. Dutch economists and leaders of the glasshouse industry generally believe that there is no case for a further expansion of the Dutch glasshouse acreage in the next few years. New construction will mainly be relocation and modernizing of older structures.

Singerely,

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