## SPECIALTY CUT FLOWER VARIETIES H. Chris Wien, Department of Horticulture Cornell University, Ithaca, NY 14853

SUMMARY: Specialty cut flowers are those grown locally, generally marketed locally or nearby, encompassing many flower species, and of growing popularity because of their novelty, freshness and helping to boost the local economy. The most popular species include sunflowers, snapdragons, zinnias, celosia and lisianthus, but more unusual species such as Campanula, anemone, ranunculus and many others, as well as woody species.

Sunflowers used as cut flowers typically are varieties that do not produce pollen, and most commonly do not produce branches. Most popular varieties are the traditional orange petal types with dark centers, such as Sunrich Orange and Procut Orange. More recently, petal colors have varied from white to dark red, and flower centers have shown similar color variation. Branched varieties have traditionally been thought to be most suitable for the home garden, but their smaller flower size have use among commercial growers. If the growing point is pinched out after the plants have developed about 6 leaves, the plants are forced to branch and produce several branches, thus increasing yield. Again, considerable variation in flower color, petal number and earliness can be found among the branching types.

Snapdragons have also diversified from the traditional lipped flower to offer choice of an open flower, as in the early 'Chantilly' series, and the double open-face type 'Madame Butterfly'. Adaptation to cooler or warmer conditions is indicated by the variety type ranging from 1 to 4.

There has been little change in zinnia types in recent years, but colors among tall, large-flowered types have diversified, such as 'Zowie Yellow Flame', and 'Uproar Rose'.

Among celosia varieties, two main flower head types exist: the cockscomb and the plume. Both have had considerable varietal development in recent years. The cockscomb type tends to be more sensitive to environmental conditions during flower formation. This implies that the non-branching 'Bombay' series is best grown under the temperature control of a greenhouse, while branching varieties such as 'Kurume' and 'Chieftain' are more versatile because they flower over a longer growing season.

A cut flower grower can choose among hundreds of dahlia varieties, many of which are well suited as cut flowers. Learning from the experience of other cut flower growers through the Association of Specialty Cut Flower Growers can provide very useful information on which ones are currently in vogue.

Although lisianthus (*Eustoma grandiflora*) was originally a wildflower native to the Midwestern USA, plant breeding by several companies has resulted in a wide range of flower colors ranging from white to dark red. The double petal types resemble roses, but have vase life of nearly two weeks. Several series should be considered by cut flower growers: 'Cinderella', 'Arena' and 'ABC'.

Marigolds have been considered to be bedding plants not suitable for cut flower production in North America. However, the advent of the 'Babuda', 'Jedi' and 'Optiva' series, with their long stems, fully

double flowers and long vase life have aroused interest in this species. Immigrants from south Asia, who are used to marigold as an important cut flower, have strengthened this trend.

Some less common cut flower species have been recently introduced from other countries. The bulb forming 'Eucomis' or pineapple lily originated in South Africa, and has been developed in New Zealand. Flower colors from ivory to dark red, combined with vase life durations of more than 3 weeks give them considerable potential.

*Campanula medium* grows very well as a spring-time cut flower in a high tunnel. The Champion series, ranging in flower color from white through pink and blue, performs well with good stem length.

Other high tunnel crops worth considering are anemone and ranunculus. Their adaptation to cool temperatures suggests that they should be planted in winter, and then would come into flower in April, a time when little else is in bloom. Active breeding programs have developed a number of attractive lines, primarily in Europe and Israel.