# Miscellaneous Publication 138 TEXAS AGRICULTURAL EXPERIMENT STATION-THE TEXAS A\&M COLLEGE SYSTEM 

# Marketing Cut-flowers and Pot-plants for Home Use <br> A. F. DEWERTH and H. B. SORENSEN* <br> LIBRARY athege or rous 

$T$
He present demand for flowers readily divides itself into two categories. The first includes flowers for special occasions, such as weddings, births, illness, funerals and holidays. The use of flowers for these occasions is dictated by long established social customs. This demand has a necessity characteristic and much of it is for floral artistry rather than simply flowers. It seems to be relatively independent of price.

## Flowers in the Home

The other category includes flowers for every day use in the home. There is no established custom in this country for using flowers in the home comparable with that found in many
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European countries. Such customs take a long period of development. Although the latent demand may be present, the necessary motivations for continued and frequent use of flowers in and about the home are lacking, at least, at prices necessary to cover existing costs of production. Economically, the present demand may be classified as non-necessity or luxury.

Sales of flowers for every-day use through regular retail flower stores probably account for less than 5 percent of all flower sales.

The customer buying flowers for every day home use usually is not willing to pay for the services of floral designing, credit and delivery associated with sales in retail flower stores.

Instead, this demand must be developed on a low price, minimum service, cash and carry basis. In the initial stages of development this may
depend largely on impulse where the decision to buy is made at the point of purchase. As people acquire the habit of buying flowers for home use, such flowers will become less a luxury and more of a necessity.

## Where People Go

A major obstacle in developing the impulse market for flowers in retail flower stores is the relatively low volume of traffic through these highly specialized outlets. The obvious alternative is to place flowers in certain types of retail stores where the volume of traffic already is high and selling costs are low because of high volume sales and the elimination of many special services.

The ever-expanding line of goods handled by grocery supermarkets and variety stores, and the phenomenal growth of one-stop shopping centers


Complete set of materials required for preparation of plants and flowers for mass market outlets.


Potted chrysanthemums showing size of plant most acceptable for this market and method of preparation for sale.
have established a keen interest in developing them as outlets for flowers. Flowers in such heavy traffic outlets can compete more effectively for their portion of the consumer's dollar spent on impulse purchases.

## Experimental Procedure

A study was inaugurated in February 1955 to explore the market potential for flowers in two separate outlets in Bryan, Texas, one being a grocery supermarket and the other a variety store.

The study was designed to supply cut-flowers and flowering pot-plants that can be used to good advantage in the home and to market them at prices within the reach of purchasers of average means.

The pot-plants and cut-flowers used were produced in the Department of Floriculture and Landscape Architecture of the Texas A\&M College System.

To date this work has developed information on production and marketing that indicates there is a market for such products. The work needs further expansion and more intensive study, and plans have been made by the Texas Agricultural Experiment Station for an enlarged study during 1955-56.

## Sell Themselves

Packaged pot-plants and cut-flowers are impulse sales items and should sell
themselves. The following conditions, however, must be provided:

1. The product must be one that is appropriate and that can be used advantageously by the average purchaser.
2. The product must be seen in good condition by the purchaser and in approximately the form in which it can be used best in the home.
3. It must be in convenient form to be carried home by the purchaser.

The first consideration in handling plants or cut-flowers in a retail store is to maintain sufficient moisture in close proximity to the plant material. Cellophane bags have made excellent protective overwraps for plants and cut-flowers used in this study. The cut-flowers or potted plants are placed in the bag, and the top is heat-sealed to retain the moisture around the plant or cut-flowers.

A $5 \times 6 \times 20$-inch bag will accommodate most of the pot-plants produced in $3,3-\frac{1}{2}$ or 4 -inch pots. For cutflowers, it is suitable for 5 to 7 stems in 12 to 15 -inch lengths.

The cellophane-wrapped pot-plants make an excellent display in a produce case, on a table or on a display rack.

In order to display the cut-flower bags or boxes in an upright position, a corrugated cardboard rack was constructed that could be inserted in the produce case. This rack is 10 inches high and has twenty $4 \times 6$-inch compartments. Each compartment will accommodate one package.

Some flower colors such as red and bronze will look "dead" under the usual fluorescent lighting in the supermarkets. When special lighting cannot be provided, the use of such colors should be avoided.

Pot-plants packaged in cellophane will remain in good condition for about 2 weeks in a refrigerated produce case, or for about 3 to 4 days on a table at room temperature.

The packaged cut-flowers must be sold from a refrigerated produce case. Carnations and chrysanthemums keep in excellent condition for 3 days without shortening the life of the flowers after they are removed from the packages.

## Plants Classified

The plants have been classified into various types. All were marketed in $3-1 / 2$-inch plastic pots, except Easter lilies marketed in 5 -inch plastic pans.

| $\quad$Type of <br> plant or flower | Mark-up over <br> cost |
| :--- | :---: |
| Flowering plants | 100 to $290 \%$ |
| Foliage plants | 100 to $340 \%$ |
| Ferns | 190 to $230 \%$ |
| Small shrubs |  |
| $\quad$ (gardenias) | $240 \%$ |
| Novelty plants <br> Cut-flowers | 200 to $240 \%$ |
| ( 20 to $270 \%$ |  |

The following plants were used in each classification:

1. Flowering Plants - African violets, ageratum, begonia (semperflorens, lettuce leaf, tuberous rooted), cal. ceolaria, chrysanthemum, cineraria, geraniums, miniature geraniums, Easter lily, fuchsia, gloxinia, tulip.
2. Foliage Plants-acalypha, caladium, coleus, croton.
3. Ferns-asparagus sprengeri and plumosus, Boston fern, leatherleaf fern.
4. Small shrubs-gardenias.
5. Novelty Plants-devil's ivy, jade plant.
6. Cut-flowers-

Asters (5 short stems)
Bells of Ireland (2 branched stems)
Carnations ( 5 short stems)
Chrysanthemums ( 5 short stemsdisbuds)
Daisy, shasta ( 5 short stems)
Daisy, marguerites (7 short stems)
Snapdragons and heather (5 short stems, 1 sprig heather)
Ranunculus and heather (6 stems)
Iris ( 5 short stems)
Daffodils ( 5 short stems)

No sales campaign was conducted. Cutflowers were sold only in the supermarket as no refrigerated case was azailable in the variety store.
The pot-plants were simply placed on a table and the cut-flowers displayed in a refrigerated produce case with a price tag in each package. The displays usually consisted of 50 to 75 pot-plants and 20 packages of cutflowers.
All sales were consignment selling. This procedure permitted perfect control and manipulation of the products when necessary.
The greatest sales volume was experienced on week-ends-Thursday, Friday and Saturday. Perhaps further trials will indicate that this product should be displayed only during this period.
Pot-plant sales varied from week to weck and between the two stores. During the first 15 weeks of the study, a minimum of 50 and a maximum of 100 plants were placed in each location per week. Sales dropped somewhat in both stores at the end of each month, and total sales dropped toward the end of May. Present indications are that summer sales will be lower than winter sales.
During the winter, the supply of pot-plants available for this study was not great enough to supply the demand.
Properly-identified pot-plants suitable for garden planting have considerable sales appeal during the growing season. This has been especially true of caladiums, coleus and chrysanthemums.
Twelve to 40 packages of cut-flowers have been sold each week since

February, with an average of about 15 packages. The present trials have not been conducted on a large enough scale to determine the kind of flower or color preference. Indications are that carnations and chrysanthemums are most popular, and that mixed colors of any cut-flower move faster than single colors.

## Instructions Given

Instruction slips were placed in each package. Following are some examples:

## FRESH CUT FLOWERS

To insure the lasting quality of these cut-flowers, recut the stems when they are removed from the package and place the stems in luke-warm water.

Add clear, cool water to the container daily.

The cooler the temperature in the location you place your cut-flowers, the longer they will last.

## FRESH POT-PLANTS

To obtain the best results with this small pot-plant, water it daily.

When very dry, the best method is to submerge the pot in water until bubbles cease rising.

Do not place the plant in drafs of hot or cold air.

## CHRYSANTHEMUM POT PLANTS <br> The name of this variety is:

After the flowers have faded on your plant, it may be planted in the garden and it will flower again this fall. Follow the procedure outlined below.

1. When the flowers have withered, knock the plant out of the pot, cut off the plant stems about two inches above


Example of novelty planter used in these studies.
the pot, and plant in your garden.
2. Wisen the new shoots arise and are about four inches long, pinch off a small portion at the tip of each shoot. Do this on each shoot each month until early August.
3. Apply any complete fertilizer once each month until the first of September. During hot, dry weather in summer keep the plants well watered.
4. If insects attack inse plant, use any


Packaged cut-flowers ready for sales display.


Packaging procedure for pot-plants.
all-purpose combination dust or spray to control them.
5. Cbrysanthemums, in all varieties, are excellent garden plants for Texas conditions and the flowers can be cut for long-lasting colorful bouquets in the home.

The present commercial production of pot-plants is designed almost entirely for holiday and special occasion sales. Flowering plants that can be used effectively on an everyday basis must be small enough to be used on a window shelf, coffee table or mantel, and plants in pots 4 inches or less in diameter, with an overall height of 16 inches or less fulfill these requirements.

The production for this study has been mainly in $3-1 / 2$ and 4 -inch plastic and clay $3 / 4$-inch pots and pans, but trials are being made in sizes ranging from $2-1 / 2$ to 5 inches. Plants grown in clay pots were removed and placed in colored plastic pots prior to packaging.

## Information Available

Data on production schedules and procedures are available on all of these crops upon request. But since the production of out-of-season chrysanthemums is the most complicated, and procedures for all other crops listed are similar, it will be cited as an example.

The day crysanthemum cuttings are rooted or received from other sources, pot one to a $3-1 / 2$-inch pot, pinch and and start short days in a mixture of one-third soil, organic matter and sand, steam sterilized.

Feed once a week during spring and summer using a 15-30-15 fertilizer at 1 ounce to 2 gallons of water. Apply every 10 days during late fall and winter.

Place plants pot to pot until well established and then space to 9 pots per square foot for finishing. Garden varieties grown in this manner in Texas will have an approximate production cost of 19 cents per pot and can be flowered in 60 davs from potting. The names of suitable varieties for various times of the year will be furnished on request.

Cut-flowers for everyday use in the home also have size limitations. Any housewife who has tried to arrange chrysanthemums with 36 -inch stems or carnations with 30 -inch stems has met with considerable difficulty. The real utility cut-flower for home deco:
ration is one with a stem from 12 to 15 inches in length. Production of cut-flowers in quantity with stems of this length requires a revision in the growing schedules of most cut-flower crops.

The procedures for such production have been worked out in detail for chrysanthemums as follows:

Plant rooted cuttings directly in bench, expose to 7 long days, soft pinch and give short days until flowering. Four and a half crops per year on the same bench space are a possibility under Texas conditions with this schedule.

Spacing of $6 \times 6$ inches appears to be best. Prune pinched cuttings to 3 stems per plant.

When disbudded, varieties with strong substance and large flowers package better than decorative types, single and anemones. This type also has moved more readily in this market.

Trials on the production of potplants and cut-flowers for use in massmarket outlets are now being conducted and expanded to determine the most appropriate size, quality and variety. Timing, cultural practices, type of container, keeping quality and production costs for Texas conditions also are being studied on the various crops believed to be suitable for this market.

## Summer Production

Limited research has been devoted to the development of mass-market outlets for surplus summer production of florist crops. Results in these trials indicate that the great bulk of the demand for flowers for home use occurs when home-grown flowers are not readily available, or when people spend a greater portion of their time indoors.

There have been rather definite indications that this is not necessarily a low-price or bargain-price market. Varying prices on the same items from week to week had very little effect on the total amount of merchandise sold.

New items move faster when first introduced than they do after several weeks' display. In these trials, this reaction may be due only to the fact that trials were conducted in a small city.

New ideas introduced in labeling, identification, packaging, containers and display have resulted in sales in. creases.

Out-of-the-ordinary plants, properly
identified, always move rapidly at mark-ups well above the average.

Cut-flowers move well when uneven numbers are placed in the pack age. For instance, package 5, 7 or flowers rather than the conventional or 12 flowers as they are now sold Uneven numbers are easier to use in arranging cut-flowers.

Potted plants that can be used i garden plantings move especially wel during periods when outdoor planting is being done, and also on weekends when the weather is favorable for out door activity.

Potted plants in plastic pots sell faster than those in conventional clay pots.

## Some Obstacles

There are apparent obstacles to rapid development of mass-market outlets for these products on a large commercial scale. Unpredictable demand and inadequate supplies, wide fluctuation in wholesale market prices, new size requirements of production, and total lack of grading standards are some of them.

In some areas, retail florists will re sist the development of such mass-market outlets for flowers for fear it might adversely affect their business. Other progressive retailers believe such out lets are complementary to their bus iness rather than competitive.

The reluctance of some growers and wholesalers to supply mass-market out lets for fear of reprisals from retail florists is another foreseeable obstadle Local production by small growers can supply such a market if adequate quantities are produced properly.

The fundamental problem, from present indications, is the inadequate production of fiorist products in the South to supply the potential demand that can be developed by such outlets. Another problem is the lack of an es tablished custom for the frequent and regular use of flowers in the average home.

Until such a custom is more firmly established, flowers for everyday use in the home will remain at a rather low level on the average purchaser's scale of value.

The development of mass-market outlets which lead to impulse buying will do much to initiate this custom A period of education and promotion and continued research are needed to find more effective merchandising practices for satisfying the demand.

