

Production & Marketing Reports

A Comparison of Attitudes and Practices among Sectors of the Oklahoma Floriculture Industry

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Summary. Oklahoma floriculture producers, ornamental-horticulture retailers, mass-market retailers, and cut-flower wholesalers were surveyed to compare and contrast the industry in terms of attitudes towards their products and problems. Overall, attitudes of all four segments of the industry were neutral to negative on potted flowering plants, but were positive to neutral on bedding and foliage plants. However, producers were slightly negative concerning the postharvest life of bedding plants. While cut-flower wholesalers had a positive attitude concerning cut flowers, ornamental-horticulture retailers and mass-marketers tended to be neutral to negative. In particular, retailers and mass-marketers believed that cut flowers were too expensive and too short-lived. Floral preservatives were

used by 82% of ornamental-horticulture retailers, while only 19% of mass-market retailers used preservatives. All cut-flower wholesalers used preservatives. Capital availability and market demand were the factors most limiting expansion for producers and ornamental-horticulture retailers; whereas mass-market firms listed competition as their most limiting factor.

Finding or developing a marketing niche can be crucial for the profitable survival of floriculture crop producers. Competition from other domestic producers or from imports, as with cut flowers, is keen in many areas of the country. The development of mass merchandising stores is exerting tremendous retailing pressure in both urban and rural areas. The industry also is faced with pressures from candy, wine, balloon, and other gift sellers.

Many floriculture businesses search for marketing niches actively (Armitage, 1986; Behe et al. 1992a, 1992b; Behe and Wolnick, 1991; Prince et al., 1990, 1991; Rhodus, 1989). Plant breeders try to improve cultivated species after identifying flaws or unfilled industry needs in the current cultivars. Disease-resistant carnations, short poinsettias, and yellow pe-tunias are notable examples. New crop developers also are trying to fill open niches by finding new species with the appropriate characteristics (Armitage, 1986). Similarly, Prince et al. (1990, 1991) surveyed retail florists and mass marketers concerning services provided by floral suppliers, and detailed opportunities for suppliers to develop more-effective servicing programs. Research on consumer needs and concerns always has been important for retailers

(Behe et al. 1992a, 1992b; Behe and Wolnick, 1991; Rhodus, 1989). Growers may benefit from information on the floriculture industry when they define and exploit niches in the market. The goal of this survey was to compare producers, ornamental-horticulture retailers, mass-market retailers, and cut-flower wholesalers regarding their attitudes and marketing practices for bedding plants, potted flowering plants, cut flowers, and foliage plants.

Four sectors of the floriculture industry were examined: production, ornamental-horticulture retail, mass-market retail, and cut-flower wholesale. Producers included any firm that produced and sold plant materials either retail or wholesale. Ornamental-horticulture retailers sold plant materials and related supplies to the public, but did not produce any plant materials. Mass-market retailers were defined as those firms in which ornamental plants were not the main focus of their business, such as supermarkets, discount stores, and feed stores. Businesses with only one location were also considered as mass market if they fit the definition, because they generally handle plant materials similarly to multi-location mass marketers.

Surveys were based on the National Nursery Industry Survey developed by the S-103 Regional Marketing Research committee (Henderson and Schatzer, 1991) and on input from producers, ornamental-horticulture retailers, and cut-flower wholesalers. Surveys initially were tested and edited by two producers, two ornamental-horticulture retailers, and one mass-market retailer. Names and addresses were obtained from the Oklahoma Dept. of Agriculture, which requires a license for the commercial handling of plant materials. Sod producers were removed from the list. Separate surveys were developed for producers, ornamental-horticulture retailers, mass-market retailers, and cut-flower wholesalers. Surveys and postage-paid return envelopes were mailed to all producers and ornamental-horticulture retailers. Because of the large number of mass-marketers, only 500 surveys were mailed to firms selected at random, of which 16 were completed and returned. Ornamental-horticulture retailers completed and returned 51 surveys of 1500 mailed. The distribution of respondents were examined in conjunction with industry experts and determined

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Table 1. Percentage response of gross sales in 1990 by Oklahoma retail, mass-market, cut-flower wholesale, and production firms.

Gross sales	Retail (%)	Mass-market (%)	Cut-flower wholesale (%)	Production (%)
\$0-10,000	9	5	0	5
\$10,001-\$25,000	9	5	0	3
\$25,001-\$50,000	14	5	0	8
\$50,001-\$100,000	21	14	0	14
\$100,001-\$250,000	21	24	0	28
\$250,001-\$500,000	17	19	0	26
\$500,001 and above	10	28	100	17

to be logical and representative in regards to gross sales, but noted that some areas of the state were under-represented (R. Moesel, personal communication). Consultation with industry leaders was required because current data on the floriculture industry in Oklahoma do not exist. Personal visits were made to seven ornamental-horticulture retailers and five mass marketers selected at random from the appropriate areas of the state to ensure that all sizes of businesses, in terms of gross sales (Table 1) and geographic location, were represented, bringing the percentage of surveys completed to 4.2% for mass marketers and 3.9% for ornamental-horticulture retailers. Producers returned 36 of 250 (14.4%) surveys mailed. The cut-flower wholesale surveys were conducted by personal interviews rather than by mail because of the small number of businesses involved. Four of the six cut-flower wholesalers in the state (66.7%) were surveyed.

Respondents were asked to categorize their opinion of bedding plants, potted flowering plants, cut flowers, or foliage plants as follows: too 1) expensive, 2) limited in selection, 3) little fragrance, 4) short-lived, and 5) difficult to maintain. For each of these questions, respondents were asked whether they strongly agreed (1), agreed (2), were neutral (3), disagreed (4), or strongly disagreed (5). By dividing the 1 to 5 scale into three equal segments, the responses were averaged and interpreted as follows: 1.0 to ≤ 2.3 , had a negative attitude towards the crop area; >2.3 to <3.7 , had a neutral attitude towards the crop area; and $3.7 \geq$ to 5.0, had a positive attitude towards bedding plants, potted flowering plants, cut flowers, or foliage plants.

Overall, all four segments of the industry were neutral to negative on potted flowering plants, but were posi-

tive to neutral on both bedding and foliage plants (Figs. 1-3). However, producers were slightly negative concerning the postharvest life of bedding plants and ornamental-horticulture retailers were not satisfied with the

price and selection of foliage plants (Figs. 1 and 3). Cut-flower wholesalers' attitudes were positive towards cut flowers (Fig. 4). In particular, they strongly disagreed with the idea that cut flowers were too expensive and too limited in selection. Ornamental-horticulture retailers and mass marketers, however, tended to agree that cut flowers were too expensive, limited in selection, and short-lived.

Other questions concerning cut flowers indicated that 82% of ornamental-horticulture retailers use floral preservatives, while only 19% of mass-market retailers use preservatives (data not presented). All cut-flower wholesalers surveyed used floral preservatives. Ornamental-horticulture retailers indicated that they would like a

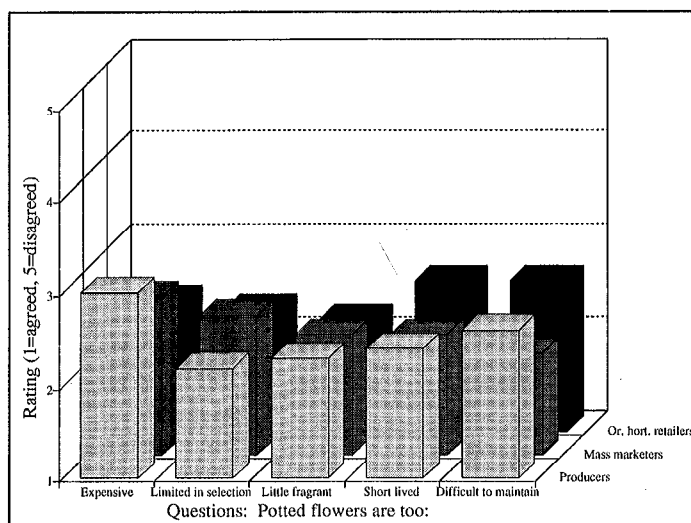


Fig. 1. Average responses of producers, ornamental-horticulture retailers, and mass-market retailers to various questions concerning potted flowering plants using the following scale: strongly agree (1), agree (2), neutral (3), disagree (4), and strongly disagree (5).

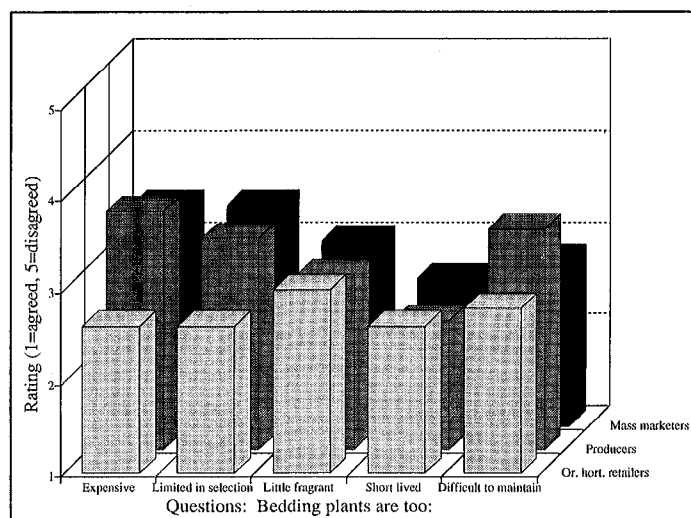


Fig. 2. Average responses of producers, ornamental-horticulture retailers, and mass-market retailers to various questions concerning bedding plants using the following scale: strongly agree (1), agree (2), neutral (3), disagree (4), and strongly disagree (5).

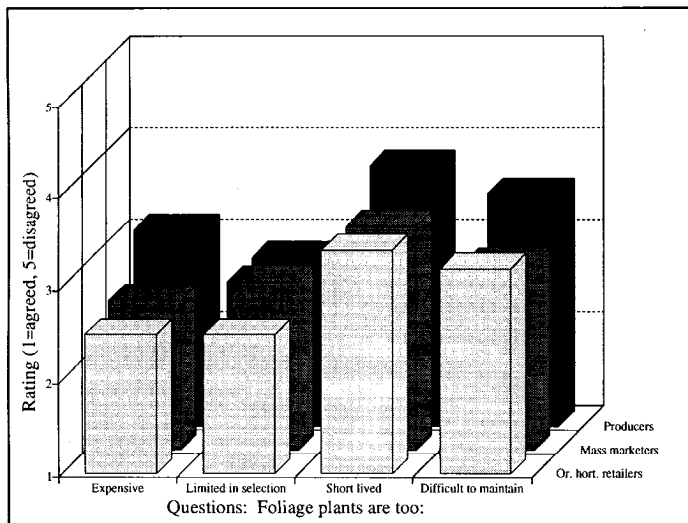


Fig. 3. Average responses of producers, ornamental-horticulture retailers, and mass-market retailers to various questions concerning foliage plants using the following scale: strongly agree (1), agree (2), neutral (3), disagree (4), and strongly disagree (5).

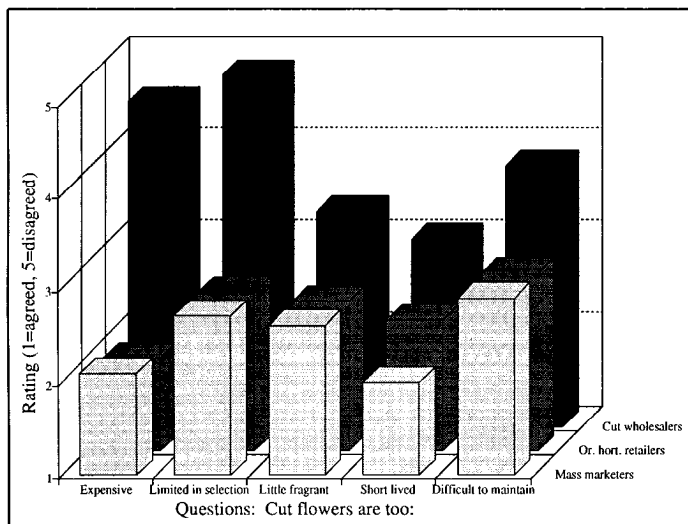


Fig. 4. Average responses of ornamental-horticulture retailers, mass-market retailers, and cut-flower wholesalers to various questions concerning cut flowers using the following scale: strongly agree (1), agree (2), neutral (3), disagree (4), and strongly disagree (5).

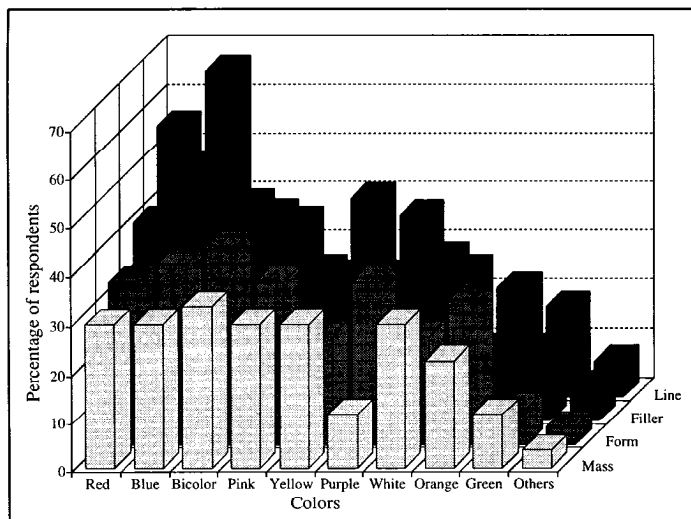


Fig. 5. Percentage of ornamental-horticulture retailers who would like to have a greater number of species from which to choose in various cut-flower categories. Other colors mentioned included peach, lavender, rose, and mauve.

greater number of species from which to choose. Red, blue, bicolor, line, and filler flowers were noted in particular (Fig. 5). Cut-flower wholesalers had preferences similar to ornamental-horticulture retailers (data not presented). Finally, the minimum stem length preferred was 46 to 61 cm for 74% of ornamental-horticulture retailers, 52% of mass-marketers, and 75% of cut-flower wholesalers surveyed (Table 2). No firms indicated that they needed the shortest stems to be longer than 76 cm.

The sales pattern for each sector varied considerably. Ornamental-horticulture retailers reached sales peaks in February, May, and December (Fig. 6). Sales peaks for cut-flower wholesalers were similar to those of retailers, except that sales in November were higher than in December. Mass market and producer sales increased from a low in January to the peak month of April, indicating the importance of bedding plants to those segments of the industry. In 1991, bedding plants were the largest sector of the U.S. floriculture industry, making up 35% of the total wholesale sales (USDA, 1992).

When producers were asked what factors most limited their expansion, the availability of capital was ranked the first of 15 factors (1st) as most limiting (Table 3). The difficulty in obtaining financing may be restricting expansion to small, self-financed increments. This may be inhibiting a firm's ability to respond to increased competition (4th-most-important factor) by mechanization or upgrading of facilities. The role of market demand as the second-most limiting factor for producers is not surprising. Few businesses have the luxury of completely selling all of their product. The third-most-important factor—lack of land/space—may be due partially to increasing urbanization, which not only locks in some businesses, but drives up the price of property. Limited financing can force new businesses to purchase

Table 2. Minimum cut-flower length desired by Oklahoma retail, mass-market, and cut-flower wholesale firms.

Length (cm)	Retail (%)	Mass market (%)	Cut-flower wholesale (%)
46–61	74	52	75
61–76	26	48	25
76–91	0	0	0
91–122	0	0	0

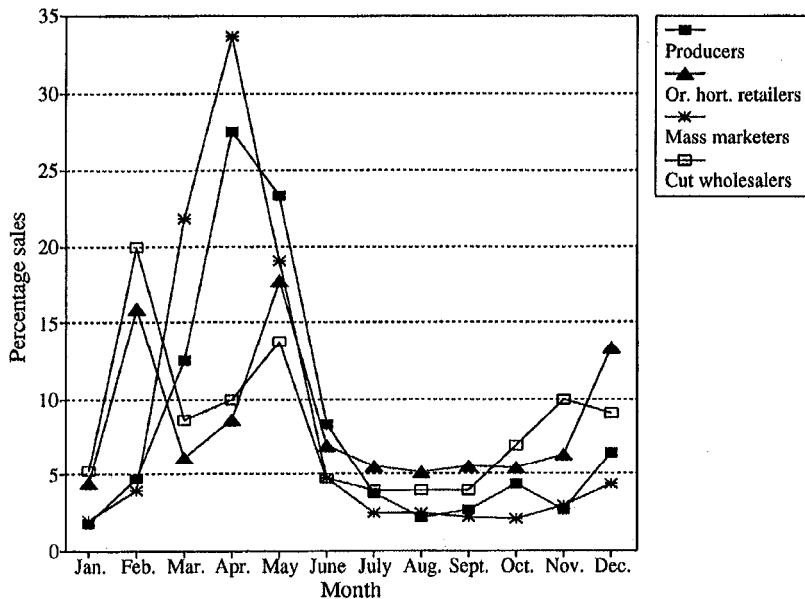


Fig. 6. Percentage sales distribution by month for production, ornamental-horticulture retail, mass-market retail, and cut-flower wholesale firms.

the minimum amount of property needed, thus hindering the firm's expansion at a later date. Labor ranked as the fifth-most-important factor and, considering that 70% of respondents had no problem with competent management, the primary labor restriction may be occurring with less-skilled or seasonal employees.

Factors that were not important

to most producers included limited availability of plant materials (15th); slow payment on accounts/delinquent accounts (14th); lack of fast, reliable shipping (13th); water supply (12th); and environmental regulations (11th) (Table 3). Reactions to the latter two factors would probably vary greatly among states.

Ornamental-horticulture retail

firms also mentioned market demand (1st), capital availability (2nd), labor (3rd), and competition (4th) as the four factors limiting expansion the most (Table 4). In contrast to producers, slow payment of accounts/delinquent accounts was the fifth-most-limiting factor for ornamental-horticulture retail firms. Ornamental-horticulture retail firms tended to be smaller, with lower gross sales (Table 1); consequently, they may be affected more by problems with cash flow caused by delinquent accounts. High wholesale prices was tied for fifth in importance for ornamental retailers.

As with producers, environmental regulations (16th); limited availability of plant materials (12th); and lack of fast, reliable shipping (14th) were among the five least-important reasons limiting a firm's expansion (Table 4). In addition, few ornamental-horticulture retailers had problems with low-quality plant materials (13th) or weather uncertainty (15th).

Competition (1st) and market demand (2nd) were listed by mass-market firms as the two main reasons for limiting expansion (Table 5). Compared to ornamental-horticulture retailers and producers, mass-market firms also were concerned about the ability to hire competent management (3rd), land/space (4th), and labor (5th).

The least-important factors for mass marketers were water (14th); lack of fast, reliable shipping (13th); limited availability of plant materials (11th, tie); weather uncertainty (11th, tie); and lack of personal management skills (10th) (Table 5). Thus, mass marketers apparently were able to obtain the quantity of plant materials they needed, but not the quality they wanted.

This survey identified a few aspects of floriculture crop production and sales that might be exploited in Oklahoma by the floriculture industry. A potential niche might be found in the disparity in attitudes concerning cut flowers between wholesalers and mass-market or ornamental-horticulture retailers. Cut-flower wholesalers are satisfied with the product they are handling currently, and specialty cut-flower growers may be more successful in some cases by selling new or unusual flowers directly to retailers. In particular, red or blue line flowers might do very well. Also, considering the drop in sales during midsummer, growers would want to produce as much mate-

Table 3. Response of Oklahoma producers ranking various factors as most important in limiting the expansion potential of their firm. Factors were ranked by respondents as 1 to 5, with 1 as the most-important factor.

Limiting factor	Average ranking by respondents ^a	Factor was not a problem (%)	Overall ranking of limiting factors ^b
Ability to hire/develop competent management	2.9	70	8
Capital availability	1.8	22	1
Competition	3.2	48	4
Environmental regulations	3.6	74	11
Labor	3.4	48	5
Lack of fast, reliable shipping	3.3	89	13
Lack of personal management skills	2.7	78	9
Land/space	2.2	63	3
Limited availability of plant materials	4.3	89	15
Low-quality plant materials	2.0	96	7
Market demand	3.0	33	2
Slow payment on accounts/delinquent accounts	4.0	78	14
Water supply	3.4	82	12
Weather uncertainty	4.2	59	10
Other ^c	2.3	85	6

^aAverage of respondents who considered the factor one of their top five reasons for limiting their business.

^bRanking within the column based on average rating of those who considered the factor a problem × percent of respondents who did not consider the factor a problem.

^cAge; worked at another, more-secure job; natural gas supply; lack of budget to market paid advertising vs. word-of-mouth.

Table 4. Response of Oklahoma ornamental-horticulture retail firms ranking various factors as most important in limiting the expansion potential of their firm. Factors were ranked by respondents as 1 to 5, with 1 as the most-important factor.

Limiting factor	Average ranking by respondents ²	Factor was not a problem (%)	Overall ranking of limiting factors ¹
Ability to hire/develop competent management	3.3	61	7
Capital availability	2.3	52	2
Competition	2.8	52	4
Decline in flowers for funerals	2.9	78	10
Environmental regulations	4.3	94	16
Labor	2.7	46	3
Lack of fast, reliable shipping	3.8	83	14
Lack of personal management skills	3.0	83	11
Land/space	2.9	74	9
Limited availability of plant materials	3.3	81	12
Low-quality plant materials	3.6	81	13
Market demand	2.4	39	1
Slow payment on accounts/delinquent accounts	2.8	52	5
Weather uncertainty	4.0	80	15
Wholesale prices too high	3.3	44	5
Other ^x	2.3	91	8

²Average of respondent who considered the factor one of their top five reasons for limiting their business.

¹Ranking within the column based on average rating of those who considered the factor a problem \times percent of respondents who did not consider the factor a problem.

^xDesire to keep business small, expansion doesn't always mean increased income, taxes, insurance.

Table 5. Response of Oklahoma mass-marketing firms ranking various factors as most important in limiting the expansion potential of their firm. Factors are ranked 1 to 5 by respondents, with 1 as the most important factor.

Limiting factor	Average ranking by respondents ²	Factor was not a problem (%)	Overall ranking of limiting factors ¹
Ability to hire/develop competent management	2.9	37	3
Capital availability	2.8	69	9
Competition	2.1	37	1
Labor	3.2	44	5
Lack of fast, reliable shipping	5.0	94	13
Lack of personal management skills	3.3	75	10
Land/space	2.3	56	4
Limited availability of plant materials	3.7	81	11
Low-quality plant materials	2.0	94	6
Market demand	3.4	25	2
Slow payment on accounts/delinquent accounts	2.0	94	6
Water	---	100	14
Weather uncertainty	3.7	81	11
Other ^x	2.0	94	6

²Average of respondent who considered the factor one of their top five reasons for limiting their business.

¹Ranking within the column based on average rating of those who considered the factor a problem \times percent of respondents who did not consider the factor a problem.

^xTime.

rial as possible in early spring for April and May sales. Early flowering perennials may provide the answer. In order to spread out sales, production of materials such as holly and euonymous branches with berries might be profit-

able for November and December sales. Growers also should be aware that a market might exist for relatively short-stemmed flowers that may be useful in mixed bouquets sold commonly by mass-market retailers.

The disparity in the use of preservatives between mass-market and ornamental-horticulture retailers might provide a marketing tool for small retailers or producers to distinguish themselves from mass-market retailers. Growers also may want to cater to a local market by stressing to customers the potential freshness and quality handling of the flowers. Certainly, high-quality flowers would be needed to maintain such a strategy.

In summary, this survey has provided information for individual Oklahoma firms in choosing products to produce and market. However, while the conclusions also may apply to other states in the south-central region, the results will probably vary for other areas of the United States. Spring sales peaks of mass-market retailers, for example, would be later for northern states. Regardless, similar surveys may be useful for other states or firms to identify potential marketing niches for their areas. Care must be taken when conducting surveys to assure that a representative sample of the target population is taken.

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