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Consumer Marketing Preferences for Nursery Stock[1]

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Abstract

Consumer preferences as influenced by type of packaging, size of container, and price when purchasing landscape/nursery plants were determined. From February to May 1991, nearly 1,100 questionnaires were completed through personal on-site interviews conducted at flower/garden shows and traditional garden centers. Consumers preferred by almost a two to one margin to purchase trees as balled & burlapped stock and by almost a three to one margin, to purchase shrubs in containers. Over 90% of respondants normally purchased nursery plants from garden centers where they make 60% of their plant purchases. Almost half, 48.6% of these same respondants also purchased nursery plants from discount stores where they made 22.8% of their plant purchases. In 1990, 45% of those surveyed spent $100–500 for nursery stock. Respondants were willing to spend an average of $98 on a single tree. The most important factors in purchasing nursery stock were plant quality, availability of professional help, and plant selection. Plant cost and size were less important.

Index words: Consumer preference, marketing, nursery crops.

Significance to the Nursery Industry

During the past two to three decades, the nursery industry has experienced continued economic growth. To continue to grow through the next century, the nursery industry needs to become attuned to consumers' preferences and purchasing patterns. It is interesting that 90.5% of the respondants normally purchase plants at traditional graden centers, but 48.6% of the same respondants also purchase plants from discount stores and 20.5% also purchase plants through mail order. A large majority, 75.7%, of respondants said they most likely would make their next plant purchase from a garden center. This indicates that a garden center comes to mind first, when they think ahead about making a plant purchase. If we look at where they spend their money we find that the majority, 60.6%, of their plant purchases are made at traditional garden centers. The traditional nursery/garden centers were able to get 90% of respondants to purchase plants in their retail stores, a large majority think of garden centers first, but these same customers purchased almost 40% of their plants from other retail outlets. Opportunities for increased plant sales to an existing customer base are going unmet.

Of all purchase criteria, quality was identified to be the most critical factor in the purchase decision. Trained, professional sales staff and a large selection of plant material were also very important to the respondants. Price was important but to a lesser degree. Concentrating on quality in products and sales staff along with providing a broad plant selection should aid nurseries in maintaining or improving market share. However, in the authors opinion, it appears that non-traditional nursery plant retailers have begun to address these criteria, particularly quality and trained sales staff.

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Introduction

Trees, shrubs, and other landscape species are usually marketed as "bare-root", "balled and burlapped" (B&B), or "container-grown". Whether a nursery plant is to be packaged in a certain form or marketed in a particular size of container often is decided at the nursery/grower level. Knowledge of consumers' preferences about plant quality, packaging, container type and size, and plant cost could assist the nursery industry in production and market planning.

The market for nursery stock and services is mainly centered in the 35–44 age bracket (2). Higher purchase rates of nursery products and services have been associated with higher education levels of consumers and household income over $30,000 (2). Education and housing starts also have an effect on consumer purchases of landscape plants (10). According to previous studies (1, 5), quality, low price, greater plant selection, and variety of colors were some of the attributes important to nursery stock consumers. Size and quality of the nursery stock have an effect on pricing of nursery products. In a small nursery firm, pricing is done according to plant grade (2).

The nursery industry in most parts of the United States is seasonal, with a larger proportion of annual sales during the spring than the fall. Hodges and Haydu (4) examined the nature of Florida's landscape plant industry. The peak months for 1988 total annual sales from 103 nursery businesses were March, April, and May, with 13.9%, 12.9%, and 11.4%, respectively. A similar study conducted in Oklahoma by Henderson and Schnelle (3) revealed that April, May, and June were the peak sales months for nursery stock in 1990.

The primary purpose of this study was to determine consumer marketing preferences for nursery stock as influenced by (a) type of packaging, (b) size of container, and (c) price. Additional factors considered were such store-related services as ease of access, delivery service, availability of trained professional horticulturalists, plant selection, and whether the store conducted business on Sundays.

Materials and Methods

Following extensive discussion and exchange of ideas with nursery leaders and university personnel, a comprehensive

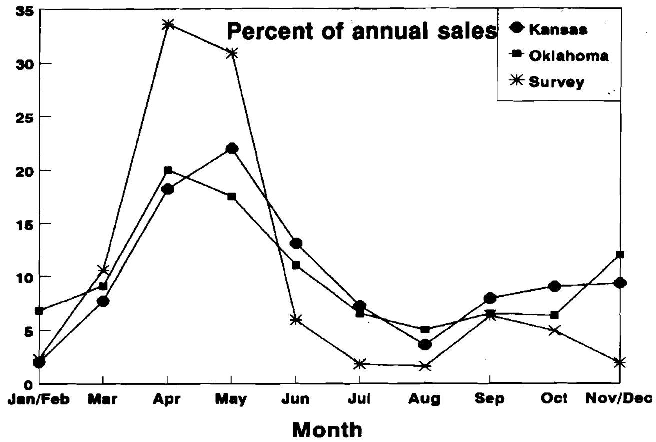

Fig. 1. Monthly sales distribution for industry from 1990 as compared to survey results.

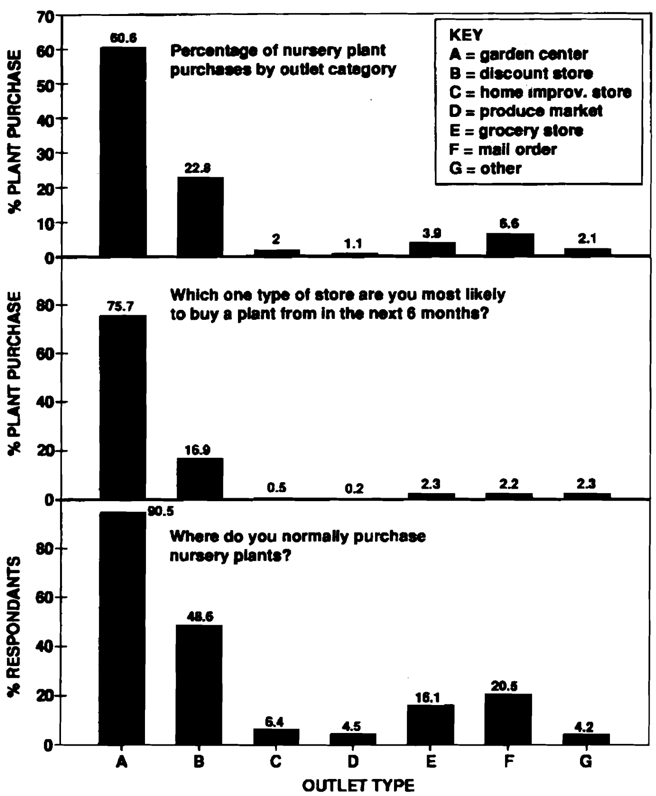

Fig. 2. Retail outlet consumer purchasing pattern.

survey questionnaire on consumer marketing was developed in January 1991. The survey questionnaire consisted of five pages containing 34 questions of which seven were related to consumer demographic information. Questions were specifically designed to answer the basic objectives of the marketing study. In addition to the basic objectives, consumers were questioned regarding their attitudes, preferences, and willingness to pay for alternative packaging designs and marketing strategies. The survey was conducted at flower, lawn and garden shows and traditional garden centers located in greater Kansas City, Lawrence, Topeka, and Wichita, Kansas. A display of nursery plant packaging was set up

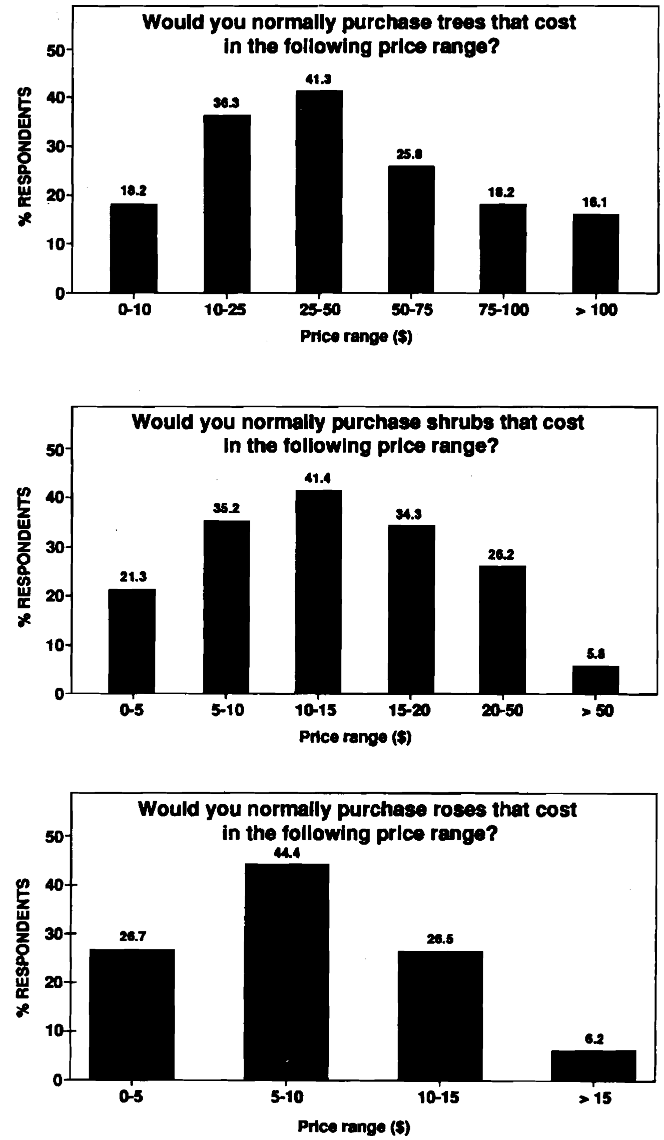

Fig. 3. Distribution of plant purchase based on price range.

and individuals passing by were asked to participate in the survey. An attempt was made to survey all individuals passing the display. Those individuals who completed the survey form were given a potted geranium, cell-pak of annuals or package of seeds. Nearly 1,100 survey questionnaires were completed by individual consumers through on-site personal interviews. Interviews were conducted on Fridays and Saturdays from 9:00 a.m. to 9:00 p.m.

Flower, Lawn and Garden Shows selected were the only show in each metropolitan area during spring of 1991. A stratified sample of garden center locations were selected according to geographic location. A-priori crosstabulations were performed on respondant demographics and Likert-Scale questions. Frequencies and means were computed for all questions. SAS was used for all data analyses (9).

Results and Discussion

Of the 1,100 participants in the marketing survey, 48% were male, 50% female, and 2% couples. Seventy-seven per cent of them were married, 87% were 25–65 years of age, and about 89% of respondents owned their residence. Al-

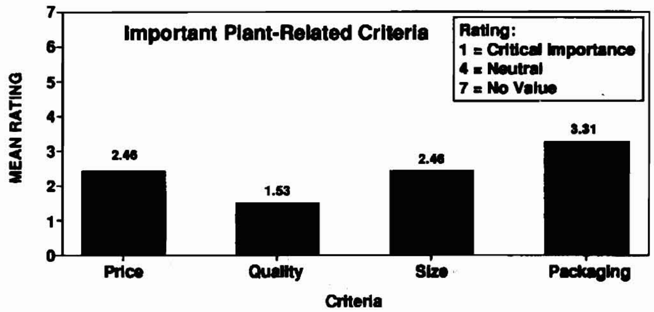

Fig. 4. Influence of value related criteria and packaging on consumer preference.

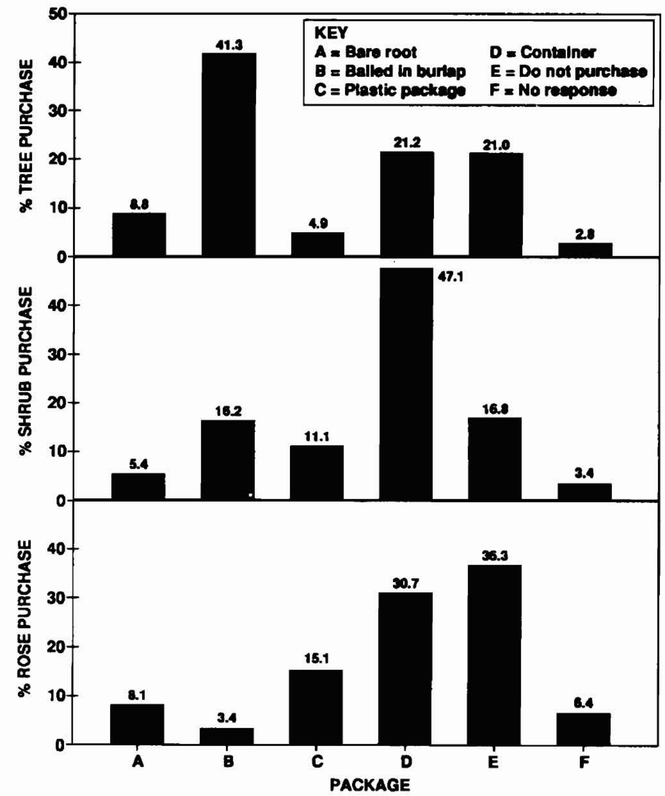

Fig. 5. Distribution of plant purchases based on form of packaging.

though the age group was somewhat different than that of the report by Gineo (1988), the 25–65 age group is considered the major part of nursery consumers. Newspaper (47%) and word-of-mouth advertising (42%) were selected as the favorite media sources when purchasing nursery stock. According to Kelly (6), who studied the effectiveness of alternative advertising media in North Carolina, neighborhood newspaper and in-store posters were found to be the best media for garden center advertising. Over 60% of plant purchases were made during April-May and 25% in September-October (Fig. 1). This seasonal pattern of nursery stock purchases is similar to the trend of actual nursery stock sales for Kansas (Stevens, 1991, unpublished data) and Oklahoma (3) for 1990 (Fig. 1). However, the peak months for nursery plant sales in Kansas are slightly different from those in Florida (4), which is due to climactic zone variation. In the present study, over 90% of respondants selected "Garden Center" for purchasing 60% of their nursery stock. Nearly 50% of the same respondents also chose discount stores such as K-Mart and Wal-Mart to shop for 23% of their nursery plants (Figs. 2A, 2C). Over 75% of those polled preferred to make their purchase within the next 6 months from a garden center, followed by 17% from a discount outlet (Fig. 2B). The high percentage of respondants indicating plant purchases from garden centers over mass merchandisers may be somewhat biased because the survey was conducted at the garden center locations. But, this bias is moderated by the fact that the survey was also conducted at the Flower, Lawn and Garden Shows.

Price. Forty-five percent of those surveyed spent between $100-500 for nursery stock in 1990. Regarding the cost of trees, shrubs, and roses, over 75% of those surveyed felt comfortable to purchase trees between $10–$50, and 16% were willing to spend over $100 on a landscape tree (Fig. 3A). Consumers were willing to spend $98.43 on a single tree for their home landscape. As to shrub purchases, the preferences for price categeories were almost the same as for trees. Except 6% were willing to spend more than $50 on a shrub with the majority selecting a price range of $5–$20 (Fig. 3B). The price range of $5–$10 was selected for rose purchases by nearly half of those surveyed (Fig. 3C). Six percent of the consumers spend over $15 per rose. Survey participants indicated that price of nursery stock was somewhat important but not as important as plant quality when shopping for nursery plants (Fig. 4). This is supported by Hodges and Haydu's (4) findings where plant grade (quality) was also ranked the most important criteria by the Florida landscape plant industry. In another study, Niemiera and his coworkers (8) found that the plant quality and selection were also considered the most important reasons when selecting a garden center.

Packaging. As to the type of packaging preference, the "Balled and Burlapped" form was chosen 41% of the time for tree sales followed by "Container" (21%) and "Bare-root" (9%) (Fig. 5). In contrast, about 47% of shrub and 31% of rose purchases were made in containerized form. Roses were also purchased 15% of the time in "Plastic Package" (Fig. 5). These findings are different from those reported by Hodges and Haydu (4) in Florida, where 82% of the nursery industry sales were packaged in containers. In spite of the advantages associated with container nursery production, a high percentage of large caliper size trees in Kansas are field grown. This mainly is due to the lower production costs, no overwintering needs, superior tree quality, and greater efficiency in water and fertilizer use under field conditions (7). Generally, the type of packaging for nursery stock was not as important as the quality, price, or the size (Fig. 4). The size of plant as it relates to its value was of more importance to the nursery plant consumer than the packaging type (Fig. 4). Other packaging-related criteria such as whether the nursery stock should fit in trunk of automobile, ease of unloading plants from automobile, or whether the consumer's clothes and automobile should stay clean were generally not important (Fig. 6).

Store Services. Of the six store services criteria, the availability of trained professional help and large plant selection were considered highly important by nursery stock consumers (Fig. 7). This is in agreement with the findings of

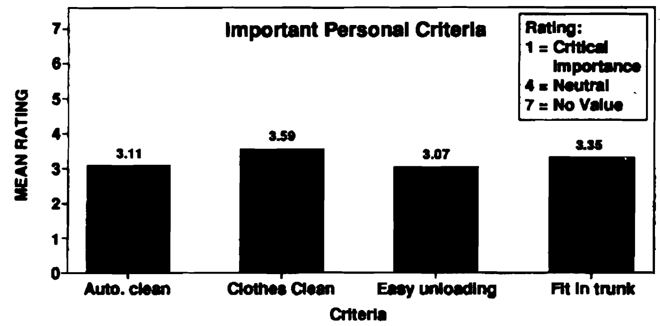

Fig. 6. Influence of consumer handling criteria on purchase preference.

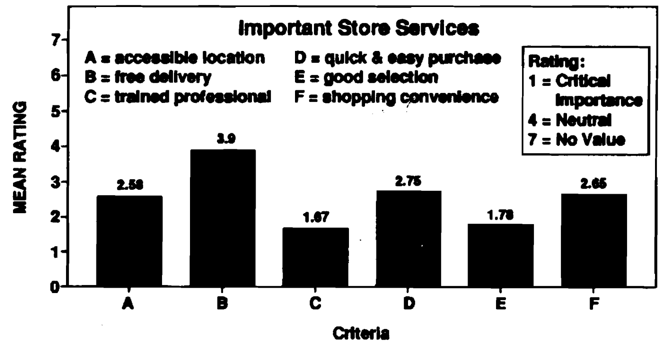

Fig. 7. Influence of store service on consumer shopping.

Niemiera et al., (8), who surveyed the garden center customer informational and marketing needs in Arizona. An accessible location, quick and easy purchase, and shopping convenience on Sunday also were important to consumers but to a lesser degree. On the subject of free delivery, consumers were noncommittal or neutral. This perhaps is due to the shopping pattern of the consumers, that is, with smaller stock purchases, there is no need for delivery by the vendor. Our survey results indicated that 87% of the consumers prefer to do their own planting as compared to 9.5% that prefer to contract out their planting work.

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