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Retail Garden Outlets: Business Characteristics and Factors Affecting Industry Performance[1]

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Abstract

A survey was conducted of retail garden outlets in Georgia which consisted primarily of traditional garden centers, feed and seed stores, and hardware stores. Plant material, for all types of retail outlets, represented the largest portion of retail sales followed by chemicals and fertilizers. The average annual retail store sales for all products was $344K, with plant material representing $111K. The survey population represented about $47M in retail plant sales and did not include mass merchants or chain garden centers. Individual consumers (87%) were the primary customers as compared to landscapers or other types of customers. Most plant material was sourced in-state (67%) and only about 3% was produced by retailers. The primary factors identified as having a potential negative impact on plant material sales were adverse weather (26%), competition from mass merchants (23%) and a slowing economy (22%). Most garden centers are open year round (74.5%) as compared to feed and seed (7.1%) or hardware (16.7%) stores. The most common consumer complaints regarding plant quality were identified. Retailer experience with the Georgia Gold Medal new plant program suggests that these programs can create pull-through sales.

Index words: retail trends, garden center, retail marketing, landscape crops, ornamentals, nursery crops.

Significance to the Nursery Industry

The survey details several characteristics of retail garden outlets in Georgia. The same type of outlets exist throughout the United States. The results of a previous in-state survey in Georgia with landscape architects and landscape contractors were found by nurseries to be applicable across the United States. The same applicability is expected for these results since much of the results deals with issues such as how decisions are made, which would not be affected by local climate or other factors. Segmentation of the retail market into garden centers, feed and seed stores, and hardware stores should help growers and other suppliers to customize marketing plans. Suppliers could develop marketing plans that help retail outlets deal with the factors that could have a negative impact on sales. Most of the plant material purchased by independent retailers represented in this survey was sourced directly from in-state growers, which suggests that local growers supplying local retailers would experience minimal direct competition with growers from other regions of the country.

Introduction

The sale of plants at retail outlets is an important component of the nursery and greenhouse industry. Sales at the retail level nationally were estimated at $1.3 billion in 1990 (9). Retail sales may account for much of the plant material that moves through the distribution channel. The type of retail garden outlets in the United States includes mass merchants (such as Wal-Mart and K-Mart), home centers (such as Home Depot and Lowe's), traditional garden centers, feed and seed stores, and hardware stores. A well focused marketing plan should be based at least in part on quantitative data for the target type of retail outlet (10). Surveys conducted by university scientists can be an important source of information for growers and a basis for their marketing strategy.

Retail garden outlets are an important part of the distribution system for greenhouse and nursery crops, and the success—or failure—of retailers strongly impacts the demand at the grower level. A better understanding of the factors that influence success of retail outlet would allow growers to identify areas where they can assist retailers and to develop marketing plans to support sales at the retail level.

The objectives of this study were to identify: (1) the type of retail garden outlets in the state of Georgia, (2) type of customers, mix of garden products sold, geographic sourcing of plant material, (3) factors that could have a negative impact on retail plant sales, (4) consumer complaints regarding plant material purchased at retail outlets and (5) the impact of new product promotion campaigns on the sale of other plants.

Material and Methods

Survey questionnaires were mailed to 421 firms listed as licensed retail nurseries by the Georgia Department of Agriculture. The initial mailing was sent in July 1996, with follow-up mailings to non-respondents in August and September, 1996. The survey did not include the mass merchants, home stores, or the large, multi-store garden center chain, Pike's Family Nurseries, located in Atlanta. Each of these groups is worthy of a separate survey, and the method of survey and the content of the survey would probably vary.

Responses were analyzed for all retail garden outlets as a group and by type of retail outlet (garden centers, feed and seed stores, and hardware stores). For analysis by type of outlet, the responses for independent garden centers with multiple outlets were combined with independent garden centers in one location. The supermarket/grocery store category had nine respondents and was not analyzed separately. The category 'other' was not analyzed separately but, as with supermarkets, was included in the category 'all firms.' For this reason, the number of respondents represented by 'all

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firms' exceeds the total number of respondents for garden centers, feed and seed stores and hardware stores. This difference is also true for total sales and other factors evaluated. Data were tabulated and analysis of response conducted using PROC GLM and PROC FREQ of SAS (11). Open-end questions were analyzed as previously described (4).

Results and Discussion

Forty-three percent of the firms (182 respondents) completed the survey. The respondents represented 123 cities located throughout Georgia with no city representing more than eight respondents. Most (79%) of the respondents were owners of their business. Therefore, the results discussed in this paper represent a large portion of the decision makers in the retail garden industry and they seem to be evenly distributed throughout the State of Georgia.

The retail garden outlets in this Georgia survey were comprised of hardware stores with a garden center (31.3%, n = 57), independent garden center with one location (25.8%, n = 47), feed and seed/farm supply stores with a garden center (15.9%, n = 29), independent garden center with multiple locations (4.9%. n = 9), supermarket/grocery store with garden center (4.9%, n = 9) and 17% of the firms that checked the category 'other,' which is not described. Traditional garden centers with one or more locations represented about 30% of the total retail garden outlets in Georgia. Hardware stores (31.3%) represented the largest single group of retail outlets but were similar in number to those of combined garden centers. With the relatively larger number of respondents for garden centers, feed and seed stores and hardware stores, survey data were analyzed for each of these types of firms. In addition, all respondents were analyzed as a group, 'all firms.' Market segmentation can provide specific information on different types of firms and is beneficial to the development of marketing plans for suppliers (10). Earlier research demonstrated that different size landscape architectural firms (1, 2, 3), landscape installation firms (5, 6), and landscape maintenance firms (7, 8) in Georgia had different service requirements.

The mix of products sold varied with the type of retail garden outlet (Table 1). For all firms, plant material was the largest portion of retail sales (36.1%), followed by chemicals and fertilizers (20.2%). Hardgoods (12.7%) and seeds (11.9%) were equally distributed, and gift shop items (3.4%) was the smallest category of products sold. Several respondents indicated that the category 'other' (11.6%) included vegetable transplants, but most respondents did not disclose the product type classified as 'other.'

Table 1. Comparison of the mix of products sold at retail garden outlets in Georgia.

Product category	Firm type: All firms (n = 151)	Garden centers (n = 51)	Feed and seed (n = 25)	Hardware (n = 39)
	percent[z]			
Plant material	36.1	54.5a[y]	10.5c	26.3b
Chemical/fertilizers	20.2	12.5c	35.2a	25.5b
Hardgoods	12.7	9.4b	11.6b	26.1a
Seeds	11.9	10.5b	27.1a	10.1b
Gift shop	3.4	5.2a	1.0b	2.0ab
Other	11.6	7.9a	14.6a	10.0a

[z]Expressed as mean percent of the value of all products sold during the preceding twelve months.

[y]Means,within a row, followed by different letters differ (P < 0.05).

The primary retail sales item for garden centers (Table 1) was plant material (54.5%), followed by much less frequently sold chemicals/fertilizer (12.5%), seeds (10.5%), and hardgoods (9.4%). The gift shop items constituted about 5% of the total sales at retail garden outlets. The percentage of sales accounted for by plant material is consistent with the characterization of garden centers as primarily an outlet for plant material.

The percentage of sales through retail feed and seed stores (Table 1) was weighted to chemicals/fertilizers (35.2%) and seeds (27.1%). Hardgoods accounted for 11.6% of retail sales followed by plant material (10.5%) and gift shop (1%). The 'other' category represented 14.6% of sales and probably includes various animal husbandry supplies. The seed sales would not be restricted to ornamental seed and would include agronomic seeds. The large portion of sales represented by chemicals/fertilizers may be due to the fact that they serve both landscape and agronomic customers.

Over three-fourths of the sales for hardware stores (Table 1) were about equally divided among plant material (26.3%), hardgoods (26.1%) and chemicals/fertilizers (25.5%). The sale of seeds (10.1%), gift shop (2.0%) and other (10.0%) accounted for the remainder of retail sales. Hardware stores

Table 2. Comparison of the mean and total value of products sold at retail garden outlets in Georgia.

Product category	Firm type[z]: All firms (n = 107) Mean	All firms (n = 107) Total	Garden centers (n = 42) Mean	Garden centers (n = 42) Total	Feed and seed (n = 12) Mean	Feed and seed (n = 12) Total	Hardware (n = 31) Mean	Hardware (n = 31) Total
Plants	111	11864	229a[y]	9615	44b	535	40b	1255
Chemical/fertilizers	76	8153	64b	2678	343a	4097	37b	1139
Hardgoods	58	6211	83ab	3496	128a	1540	32b	999
Seeds	47	5031	52b	2159	200a	2400	11b	334
Gift shop	13	1392	29a	1225	0b	0	4b	114
Other	39	4165	41a	1735	52a	630	35a	1087
TOTAL	344	36816	498ab	20908	767a	9202	159b	4928

[z]Expressed in $000.

[y]Means, within a row, followed by different letters differ (P < 0.05).

Table 3. Analysis of customers of retail garden outlets, in Georgia by type of firm.

Customer type	All firms (n = 175)	Firm type: Garden centers (n = 54)	Feed and seed (n = 28)	Hardware (n = 56)
	percent[z]			
Individual customers	87.5	79.8b[y]	87.5a	92.8a
Landscapers	9.6	15.4a	10.4ab	5.8b
Government entities	1.7	2.9a	2.1ab	0.9b
Other	1.2	1.9a	0.0a	0.5a

[z]Expressed as mean percent of sales to each type of customer.

[y]Means, within a row, followed by different letters differ ($P < 0.05$).

Table 4. Geographic sourcing of plant material by retail garden outlets in Georgia.

Customer Type	All firms	Firm type: Garden centers	Feed and seed	Hardware
	percent[z]			
In-state	66.6	64.8ab[y]	59.3b	76.6a
Out-of-state	33.4	35.2ab	40.7a	23.4b

[z]Expressed as percentage of plant material purchased.

[y]Means, within a row, followed by different letters differ ($P < 0.05$).

had the greatest emphasis on hardgood sales (26.1%) compared to feed and seed (11.6%) and garden centers (9.4%). The hardgood sales for hardware and feed and seed stores probably included landscape as well as agronomic and animal husbandry customers.

The value of the different types of products sold provided additional insight into the focus of each type of retail outlet (Table 2). The average annual retail sales for all retail garden outlets was $344K. Hardware stores averaged $159K, garden centers averaged $498K and feed and seed stores averaged $767K. The high average annual retail sales for feed and seed stores was driven by chemicals/fertilizers and seeds, both items being supplied to agronomic and animal husbandry customers in addition to the landscape market. The average annual retail sales for plant material was similar for hardware ($40K) and feed and seed stores ($44K) and was much lower than the average garden center ($229K). The total plant sales for all firms was approximately $12M (Table 2). With 107 respondents for this question, the total retail plant sales for the retail garden outlets surveyed was estimated at $47M. The total retail sales for all products was estimated at $86M. Based on the survey results, the sales potential for nurserymen supplying plant material appears greater for garden centers than for feed and seed or hardware stores. However, the appropriateness of each type of retail outlet for a particular grower would require analysis of the type of plant material purchased. The opportunity for higher average sales of plants would appear greater for garden centers than for hardware or feed and seed stores.

The customers for all types of retail garden outlets were primarily individuals (Table 3). The percentage of customers represented by individuals was about 87% for all firms. The feed and seed (87.5%) and hardware stores (92.8%) had a higher percentage of individuals as customers than did garden centers (79.8%). Garden centers had a higher percentage of landscape customers (15.4%) than did hardware stores (5.8%). The higher level of sales by garden centers to landscapers confirms the findings of previous studies on the suppliers of plant material for landscape installers (6) and landscape maintenance firms (7). The remaining small percentage of retail sales were represented by government entities (1.7% for all firms) and other types of customers (1.2% for all firms).

Most of the plant material purchased by retail garden outlets was sourced in-state (Table 4). For all firms, about 2/3 of plant material was sourced in-state. Hardware outlets (76.6%) accounted for the highest percentage of in-state plant material sourcing, and feed and seed stores sourced the least in-state (59.3%). The emphasis on in-state sourcing by all retail outlets would be consistent with most individual garden outlets making their own buying decisions and requiring relatively small quantities of plants on a frequent basis.

Retail garden outlets produced about 3% of the plant material that they retail (Table 5), in addition to plants purchased from growers. Approximately 31% of garden centers produce plant material, averaging 29% of the value of their plant material requirements or about 9% of the total plant material requirements for retail garden outlets. The feed and seed and hardware stores were less involved in plant production than were garden centers. Only 7.7% of feed and seed stores produced plants and those firms averaged 10% of their plant material requirements (Table 5), less than 1% of the total plant requirements for feed and seed stores. For hardware stores, 3.8% of the firms produced plants, averaging 25% of plant material requirements or about 1% of the total requirement for hardware stores. The survey question did not attempt to define the type of plants produced (woody, foliage, flowering, etc.) or whether plants were just 'finished' at the retail location. However, observation of retail garden outlets suggests that the emphasis may be on quick-turn crops, such as herbaceous flowering plants or the 'shifting up' of plants such as trees.

Several factors were identified as having the potential for negative impact on plant material sales (Table 6). The three most frequently listed factors, for all firms, were adverse weather (25.9%), competition from mass merchants (23.4%) and a slowing economy (21.5%). These were the three most

Table 5. Value of plant produced at retail garden outlets in Georgia.

Retail outlet	Plant production: Firms[z]	Value[y]
All firms	13.5	24.8
Garden center	30.8	29.0
Feed and seed	7.7	10.0
Hardware	3.8	25.0

[z]Percentage of firms that produce some of the plant material sold. Number of respondents, all firms,170; garden center, 52; feed and seed, 26; hardware, 53.

[y]Expressed as percentage of the value of plant material handled.

Table 6. Analysis of factors with a potential negative impact on plant sales at retail garden outlets in Georgia.

Factor	All firms (n = 158)	Firm type: Garden centers (n = 54)	Firm type: Feed and seed (n = 17)	Firm type: Hardware (n = 46)
	percent response			
Competition from mass merchants	23.4	31.5	35.3	13.0
Lack of necessary plant quality and variety	7.0	11.1	5.9	2.3
Adverse weather	25.9	20.4	23.5	32.6
Additional retail outlets (mass merchant)	1.9	0.0	5.9	4.3
Slowing economy	21.5	20.4	17.6	26.1
Inadequate supply/availability of plants	5.1	3.7	0.0	6.5
Competition	6.3	7.4	0.0	8.7
Costs	8.9	5.5	11.8	6.5

frequently identified factors for each of the three types of retailers, although the ranking varied. Competition from mass merchants was the most frequently identified factor for garden centers (31.5%) and feed and seed stores (35.3%), followed by adverse weather (20.4% and 23.5%, respectively) and a slowing economy (20.4% and 17.6%, respectively). Hardware stores were more concerned with the negative impact of adverse weather (32.6%) and a slowing economy (26.1%) than competition from mass merchants (13.0%). Apparently garden centers and feed and seed stores feel that they compete directly with the mass merchants. Of the three firm types, the garden centers (11.1%) were most concerned with their ability to obtain necessary plant quality and variety to compete in the market place. Garden centers indicated in their written comments that they need an advantage over mass merchants in regards to plant quality and variety. This was necessary to get the higher price typically charged by garden centers.

The period of time that retailers maintain a plant sales area would influence the seasonality of sales for plant suppliers. For all firms, about 36% of the respondents maintained a year-round sales area (Table 7). About 23% of all firms sell plants only during the spring season, and about 41% of the respondents operated a plant sales area during the spring and fall seasons (4–6 months). The sales season varied among the three types of retail outlets (Table 7). Most of the garden centers (74.6%) sold plants year-round (10–12 months) compared to only 16.7% of hardware stores and 7.1% of feed and seed stores.

Table 7. Seasonality of operation of plant sales areas in retail garden outlets in Georgia.

Retail outlet	Duration[z]: 1–4 months	4–6 months	10–12 months
	percent[y]		
All firms	23.1	40.8	36.1
Garden centers	12.7	12.7	74.6
Feed and seed	35.7	57.2	7.1
Hardware	24.1	59.2	16.7

[z]Expressed as spring season (1–4 months); spring and fall season (4–6 months); year round (10–12 months).

[y]Number of respondents, all firms, 169; garden center, 55; feed and seed, 28; hardware, 54.

Growers supplying plant material to garden centers would have a greater opportunity for sales through the year, compared to those supplying only feed and seed or hardware stores. Most of the feed and seed (57.2%) and hardware (59.2%) stores sold plants during the spring and fall seasons. However, a sizable percentage of feed and seed (35.7%) and hardware (24.1%) stores sold plants only during the spring season (Table 7).

The consumer complaints received by retail garden outlets regarding plant material (Table 8) provide growers with additional guidance to assist the retail merchandising of plant material. The top three consumer complaints, for all firms, in descending order, were high price (27.8%), poor quality plants (20%), and plant death or poor performance (16.2%). Four other categories of consumer complaints with about equal frequency were, plants too small (9.5%), limited variety and availability of plants (9.0%), poor labeling of plants (9.0%), and not enough care information (8.5%). The high level of consumer complaints regarding high price may help explain the request by retailers to growers for more competitive pricing to small retailers (Table 8). Another possible explanation is that retailers are marking-up plants excessively. About 36% of the consumer complaints related to poor plant quality and performance in the home garden. This could be due to the quality of plants delivered by growers, the lack of care at the retail garden center or handling of plants by consumers. Growers and retailers should work together to address the latter complaints so consumers will be more successful and more likely to purchase plants in the future. University personnel could assist consumers by providing information to retailers on how to care for plants after purchase.

The high price of plants was one of the two complaints received by all three retail outlets. (Table 8). The frequency of complaints received by the garden centers regarding high plant prices (31%) was almost twice that of any other complaint in magnitude and was the highest among the three retail outlets. Four other categories of complaints received by garden centers and representing more than 10% of all complaints were related to plant performance (17.2%), plant quality (15.5%), plant size (13.8%), and plant variety/selection (10.3%). The top two categories of consumer complaints for feed and seed stores and hardware stores were high price and poor plant quality (Table 8). Since price and quality seem to be correlated, if the performance and quality of plants were improved, retailers may be able to obtain the desired higher retail price and reduce customer complaints regarding price.

Table 8. Consumer complaints received by retail garden outlets in Georgia regarding plant material.

Complaint	All firms (n = 155)	Firm type: Garden centers (n = 58)	Feed and seed (n = 25)	Hardware (n = 37)
	percent response			
Price too high	27.8	31.0	28.0	21.6
Plants die or perform poorly	16.2	17.2	12.0	18.9
Poor quality plants	20.0	15.5	24.0	27.0
Limited variety and availability	9.0	10.3	0.0	8.2
Poor labeling	9.0	6.9	16.0	10.8
Not enough care information	8.5	5.3	4.0	10.8
Plants too small	9.5	13.8	16.0	2.7

Table 9. Impact of Georgia Gold Medal program on plant material sales at retail garden outlets.

Effectiveness	All firms (n = 65)	Firm type: Garden centers (n = 17)	Feed and seed (n = 9)	Hardware (n = 10)
	percent response			
Have not sold Gold Medal plants	24.6	10.3	55.6	50.0
Minimal to no effect on sales of other plants	38.5	43.6	22.2	20.0
Creates pull-through sales for other plants	36.9	46.1	22.2	30.0

Nurserymen in the United States have developed programs to introduce new plant varieties to the retail customer. In some cases state-wide programs have ben developed to introduce and promote these new introductions including the Georgia Gold Medal Program and the Texas Cooperative Education and Marketing Assistance Program. Key questions that arise from those providing financial support include the level of participation by those familiar with the program and, perhaps more importantly, do new plant promotions help to create pull-through sales for other plants. Most of the retail firms familiar with the Gold Medal Program attempted to sell plants (Table 9). Only 10.3% of the garden centers familiar with the program had not sold Gold Medal plants, compared to 55.6% of the feed and seed stores and 50.0% of the hardware stores. The lower participation of feed and seed and hardware stores is probably due to the difference in their product mix and the type of plants in the Georgia Gold Medal program. The plants in the Georgia Gold Medal program were more closely aligned with the product mix of garden centers.

About 50% of all retail garden outlets that sold Gold Medal plants found that these plants created pull-through sales for other plants (Table 9). The percentage of respondents indicating that the sale of Georgia Gold Medal plants resulted in pull-through (greater) sales of other plants was as high or higher than the percentage of respondents indicating minimal or no effect on sale of other plants for garden centers, feed and seed, and hardware stores. This is a strong indication that new plant introduction programs can create pull-through sales for other plants already on the market, an opportunity for the entire industry to increase plant sales. These results suggest that plant promotion programs, such as the Georgia Gold Medal program, should be supported by growers and retailers.

Retail garden outlets are an important part of the distribution network for greenhouse and nursery crops as evidenced by the value of plant sold by the survey respondents. This study provides insight into the characteristics of retail plant outlets and the differences among three types of retail plant outlets. This information could be used by growers to develop strategic marketing plans and to target marketing efforts to a specific segment of the retail garden industry.

Literature Cited

1. Garber, M.P. And K. Bondari. 1992a. Landscape architects as related to the landscape/nursery industry: I. Impact on demand for plant material. J. Environ. Hort. 10:69–72.

2. Garber, M.P. and K. Bondari. 1992b. Landscape architects as related to the landscape/nursery industry: II. Selection of the production nursery and plant availability. J. Environ. Hort. 10:73–77.

3. Garber, M.P. and K. Bondari. 1992c. Landscape architects as related to the landscape/nursery industry: III. Sources of plant material information. J. Environ. Hort. 10:78–80.

4. Garber, M.P. and K. Bondari. 1992. Improvement opportunities for growers of ornamental plants: a survey of landscape architects. HortScience 27:1322–1325.

5. Garber, M.P. and K. Bondari. 1995a. Landscape installation firms: I. Business characteristics and trends affecting industry performance. J. Environ. Hort. 13:31–34.

6. Garber, M.P. and K. Bondari. 1995b. Landscape installation firms: II. Source of plant material. J. Environ. Hort. 13:35–39.

7. Garber, M.P. and K. Bondari. 1996a. Landscape maintenance firms I. Business features and factors influencing industry performance. J. Environ. Hort. 14:53–57.

8. Garber, M.P. and K. Bondari. 1996c. Landscape maintenance firms: III. Opportunities for cooperation in the landscape/nursery industry. J. Environ. Hort. 14:62–66.

9. Hall, C.R. 1990. Trends in the nursery industry in Texas and the United States. Texas A&M.

10. Powers, T.L. 1991. Modern Business Marketing. West Publishing. Saint Paul, MN.

11. SAS Institute, Inc. 1989. SAS/STAT User's Guide. Version 6, 4th edition, Cary, NC.