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Selling Plants through Horticultural Distribution Centers¹

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Abstract

The services most frequently provided by horticultural distribution centers (HDCs) were delivery (98%), credit (90.2%) and information (84.3%). Only a small percentage (29.4%) of HDCs communicate with landscape architects and most HDCs try to influence their plant selection. The primary criteria in selection of plant suppliers is the ability of nurseries to supply consistent plant quality. When making decisions on which plants to purchase, HDCs rely on sales records or previous purchase history (87.8%), customer requests for plants (71.4%) and availability list from growers (55.1%). The projected changes in plant material requirements include larger plant sizes (24.1%), more color items (22.4%) and more container plants, especially trees (22.4%). The primary opportunities for plant producers to assist HDCs are in marketing support (21.3%), more frequent deliveries (19.7%) and meeting commitments for product (18.0%). The most common complaints from landscapers, the primary customer of HDCs, regarding plant material were high prices (23.8%) and inconsistency of available product (20.6%). The primary change in business activity planned by HDCs over the next five years was expansion of the plant product line (25.4%).

Index words: distribution, marketing, plant trends, trees.

Significance to the Nursery Industry

Horticultural distribution centers (HDCs) are an important customer for nurseries selling to the landscape trade. A better understanding of the needs of the HDCs would allow nurseries to better serve this market segment. Plant producers should consider the projected HDC changes in plant material requirements, such as larger plant sizes, more color items, and more container plants (especially trees), when making product mix decisions. HDCs would value more frequent deliveries and growers that supply previously booked plants. Growers should provide availability lists to HDCs and prepare a summary of previous purchase history for sales presentations to HDCs.

Introduction

HDCs serve as rewholesalers for a large portion of the plant material purchased by landscape contractors. In a Georgia study in 1995, about 30% of the plant material purchased by landscapers was obtained from HDCs (3, 4). Since 1995 the amount of plant material handled by HDCs has probably increased as more growers choose to supply the landscape trade through HDCs (personal communications). The ability of growers to be good suppliers to HDCs requires an understanding of the current and future needs of this important industry sector.

As an emerging sector of the lawn and garden industry, HDCs have not been analyzed for regional/geographic differences. A 1994 report (1) provided a national overview of HDCs and their customers. The primary customer of HDCs was identified as landscape contractors (1). The plant material inventories of HDCs was influenced by landscape con-

tractors. However, a 1995 report (3) indicated that about 75% of the plant material purchased by landscape contractors was specified by landscape architects. Therefore, landscape architects indirectly influence the plant material inventories of HDCs. Communications with landscape architects should be part of a HDC's marketing plan.

This study was conducted to determine the nature of HDC communications with landscape architects, factors influencing HDCs decisions on which plants to purchase, opportunities for growers to be better suppliers, and expected HDCs changes over the next five years. Regional differences are discussed. This study provides marketing recommendations to growers regarding the needs of a major customer in the landscape industry.

Materials and Methods

Surveys were mailed to all members (158) of the HDC committee of American Nursery and Landscape Association (ANLA) in 1998. The survey contained a letter jointly signed by the chairman of the ANLA HDC committee and the senior author of this paper highlighting the goals of the survey. The initial mailing was sent in March 1998, with a follow-up mailing in April 1998. The response rate was 32.3% and did not vary significantly by region of the country.

HDC committee members were asked to identify: (a) services provided by HDCs, (b) communications with landscape architects, (c) criteria for selecting plant suppliers, (d) information used for plant purchase decisions, (e) projected changes in plant material requirements, and (f) complaints regarding plant materials received from HDC customers, primarily landscaper contractors. Data were tabulated and an analysis of the response was conducted using PROC FREQ, PROC MEANS, PROC GLM of SAS (7). Chi-square analysis was conducted to compare observed and expected frequencies for various classes of response.

The data provided by respondents were analyzed as a group and by region of the country. The region designation was the same as used by USDA in their data collection and as defined in a national survey of pest management practices in the U.S. greenhouse and nursery industry (5). The four regions were Northeast, North Central, Southeast and West.

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Table 1. Services provided by horticultural distribution centers.

Service	Region				χ^2_3	All regions ^b
	NC	NE	SE	W		
	Percent response					
Credit service	84.6	88.9	90.9	100.0	2.52 ^a	90.2
Delivery	100.0	94.4	100.0	100.0	2.80 ^a	98.0
Product warranty	46.1	38.9	36.4	77.8	1.00 ^a	47.1
Special product sourcing	61.5	83.3	63.6	45.4	6.49 ^a	68.6
Information	100.0	77.8	81.8	77.8	3.05 ^a	84.3
Education	69.2	55.6	45.4	33.3	4.85 ^a	52.9

^aChi-square with 3 degrees of freedom not significant at the 0.05 probability level.

^bChi-square with 5 degrees of freedom significant at the 0.05 level ($\chi^2_5 = 14.87$).

Results and Discussion

HDCs are rewholesalers of plant material primarily to landscapers. The profit margins are created by purchasing from growers at a discount and by adding value to the product. HDCs identified the type of services provided to add value to plant material (Table 1). There was a significant difference in the percentage of respondents that offered each of the services. The Chi-square for five degrees of freedom was significant at the 0.05 level. The services, most commonly offered were delivery (98%), credit (90.2%) and information (84.3%). Three other widely offered services were sourcing of special products for customers (68.6%), education, such as formal training sessions (52.9%), and product warranty (47.1%). Although not statistically different, there were variations between regions in the percentage of respondents offering services. The sourcing of special product for the customer was provided most frequently by HDCs firms in the Northeast (83.3%) and the West emphasized product warranty, compared to other regions. Perhaps the experience of firms in the West region with product warranty could provide guidance for other regions considering this service.

The plant purchase decisions of landscape contractors, the primary customer of HDCs, is determined in large part by landscape architects (3). As such, landscape architects influence demand for plant material at HDCs. HDCs were asked if they had a communication program with landscape architects (Table 2). The differences between regions were not significant for either the percentage of firms with a communication program or the objective of the program. A rather small percentage of HDCs (29.4%) communicate with landscape architects, ranging from a low of 22.2% in the North-

Table 2. Communications with landscape architects.

Region	Communicate	Objective	
	Yes	Influence	Monitor
	Percent response		
North Central	30.8	75.0	25.0
Northeast	22.2	25.0	75.0
Southeast	27.3	50.0	50.0
West	44.4	100.0	0.0
All regions	29.4	62.5	37.5
χ^2_3	1.46 (P = 0.691)		5.33 (P = 0.149)

east to a high of 44.4% in the West. The HDC firms that communicate with landscape architects, were asked to indicate whether the objective of their program was to influence which plants were specified or to simply monitor plant trends. (Table 2). For all HDC firms that communicate with landscape architects, about two-thirds try to influence demand, while about one-third simply monitor plant material trends. The HDCs trying to influence plant selection by landscape architects ranged from a low of 25% in the Northeast to a high of 100% in the West. The firms in the West region appear to be the most proactive in influencing demand for their plant material.

HDCs were asked to rate the importance of several criteria used to select plant suppliers (Table 3). The percentage of firms rating each factor as very important was significant at the 0.01 probability level. The most important criteria in selecting plant suppliers by HDCs in all regions was the sup-

Table 3. Relative regional importance of criteria used by HDCs for selection of plant suppliers.

Criteria	Region				χ^2_3	All regions ^b
	NC	NE	SE	W		
	Percent response					
Price	15.4	18.8	27.3	33.3	0.27 ^a	22.4
Availability list from grower	23.1	5.9	20.0	0.0	3.33 ^a	12.2
Consistent plant quality	100.0	87.5	100.0	62.5	4.67 ^a	89.4
Delivery on short notice	15.4	37.5	30.0	0.0	6.82 ^a	22.9
Impression of supplier's nursery	30.8	17.6	10.0	0.0	5.00 ^a	16.3

^aPercent response for 'very important'.

^aChi-square with 3 degrees of freedom not significant at 0.05 probability level.

^bChi-square with 4 degrees of freedom significant at 0.01 probability level.

Table 4. Relative importance of factors affecting HDC plant purchase decisions.

Source	Frequency of use				χ^2_3
	Don't use	Use a little	Use some	Use a lot	
	Percent response				
Consultation with grower/supplier	25.0	37.5	23.0	14.5	5.17 ^{NS}
Customer requests for plants	0.0	2.0	26.6	71.4	64.88**
Consultation with local landscape architect	20.5	40.7	30.6	8.2	11.49**
Nursery catalog	4.2	32.6	42.8	20.4	16.39**
Up-to-date availability from grower	0.0	20.4	24.5	55.1	30.43**
HDC sales records and purchase history	2.0	2.0	8.2	87.8	103.41**
Trade journals	6.2	44.8	38.7	10.3	22.76**
Plants observed at public and botanical gardens	16.3	53.0	18.4	12.3	20.96**
Plants observed in commercial landscapes	10.2	44.9	32.7	12.2	16.39**
Trade shows sponsored by plant suppliers	8.2	30.6	44.9	16.3	15.41**
Gardening magazines	18.4	49.0	22.4	10.2	16.55**

**Chi-square with 3 degrees of freedom significant at the 0.01 probability level.

^{NS}Chi-square with 3 degrees of freedom not significant at the 0.05 probability level.

ply of consistent plant quality (89.4%). The next two highest rated criteria were delivery on short notice (22.9%) and price (22.4%). The responses among regions were not significant but did show some interesting trends. In the West region, only two criteria, consistent plant quality (62.5%) and price (33.3%) were rated as very important. The West and Southeast regions indicated similar importance placed on the importance of price and the importance in these regions was greater than for the North Central and Northeast regions. Supplier availability sheets were used most by firms in the North Central and Southeast regions. Delivery of product on short notice was of particular importance to firms in the Northeast and Southeast regions.

To better understand how HDCs make their plant purchase decisions, they were asked to rate the importance of several sources of information (Table 4). For all sources of information there was a significant difference in the frequency of use. The three most influential sources of information, which over 50% of the respondents rated as 'used a lot', were sales records or previous purchase history (87.8%), customer requests for plants (71.4%), and plant availability list from growers (55.1%). Plant producers making sales calls with HDCs should consider preparing a list of plants sold to that HDC the previous year and the projected product availabil-

ity. The sales records should probably include timing (month), variety/cultivars, and sizes. This would expedite the purchasing decisions of HDCs and allow for greater input by the grower. The fourth highest rated source of information was nursery catalogs (20.4%). An additional 42.8% of respondent rated catalogs as 'use some' and very few respondents do not make use of catalogs. This suggests that distribution of product catalogs to HDCs would be beneficial to growers (Table 4). The remaining seven sources of information were 'used a lot' by about 16% or less of the respondents. HDC firms make 'some' use of information sources such as trade shows, plants observed in commercial landscapes, and consultation with landscape architects.

All regions agreed on the relative ranking of the top three sources of information (Table 5). For each of the top three sources, there was about a 20% point difference between the region with the lowest use (Northeast) and the region with the highest use (Southeast). There was substantial variation between regions on the ranking of the other 8 sources of information. For instance nursery catalogs were rated fourth by all firms but the use among regions (based on 'use a lot') varied from 0 percent for North Central region to a high of 31.3% for the Northeast region (Table 5). This suggests that distribution of nursery catalogs to HDCs in the Northeast

Table 5. Regional effect on factors affecting plant purchase decisions by HDCs.

Source	Region				All regions
	NC	NE	SE	W	
	percent response ^a				
Consultation with growers/suppliers	15.4	6.7	36.4	0.0	14.5
Customer requests for plants	77.0	62.6	81.9	66.6	71.4
Consultation with local landscape architect	15.4	6.3	0.0	11.1	8.1
Nursery catalog	0.0	31.3	27.3	22.2	20.4
Up-to-date availability from grower	53.9	43.9	64.7	64.6	55.1
HDC sales records and purchase history	84.7	81.3	100	88.9	87.8
Trade journals	0.0	12.6	18.2	11.1	10.2
Plants observed at public and botanical gardens	15.4	12.6	9.1	11.1	12.3
Plants observed in commercial landscapes	30.8	0.0	9.1	11.1	12.2
Trade shows sponsored by plant suppliers	23.1	12.6	9.1	22.2	16.3
Gardening magazines	15.4	12.6	0.0	11.1	10.2

^aPercent response for 'use a lot'.

Table 6. Projected changes in the plant material purchased by horticultural distribution centers.

Change in plant purchases	% Response ^z
Larger plant sizes	21.9
More color	20.3
More container plants, especially trees	20.3
Expanded product line (more varieties, new items, specialty items)	19.0
Increased use of native material	17.2
Higher quality standard for plant	4.7
Other	9.4

^zChi-square with 6 degrees of freedom significant at the 0.05 probability level ($\chi^2 = 14.31$).

region would provide more potential benefit for the grower than would catalog distribution in the North Central region. The regional variations in response can be utilized by growers to develop region-specific marketing plans.

The HDCs were asked a series of open-end questions concerning their view of future trends (Tables 6, 7, 8, 9). This is of particular importance to producers of long-term woody crops such as trees, where product mix decisions are made several years prior to sales. The HDCs were asked to identify two key changes expected to occur in the type of plant material purchased over the next five years (Table 6). The respondents identified seven categories of changes and there were significant differences in the response rate for the seven categories. The top three expected changes, each identified by over 20% of respondents, were larger plant sizes (21.9%), more color (20.3%), and more container plants, especially trees (20.3%). The HDCs also expect to expand their product line (19.0%) with more varieties, new items and specialty items. The increased use of native plants (17.2%) and higher quality standards (4.7%) were also identified (Table 6). The projected movement by HDCs to container trees, in lieu of B&B trees, is in agreement with retailers (6) and landscape architects (2), who expressed interest in increased use of container trees. Tree producers that serve multiple industry segments and previously produced only B&B trees might consider producing container trees to maintain market share.

Respondents identified seven opportunities areas for growers to assist HDCs (Table 7). The identified areas should be of particular interest to growers since they represent opportunities to distinguished themselves from other growers and to enhance their position as a preferred supplier. Although there was variation in the response for each opportunity area,

Table 8. Most common complaints received from HDC's landscape contractor customers.

Complaint	% Response ^z
Prices too high	23.8
Inconsistent availability of product	20.6
Poor plant quality	15.6
Plants too small	12.1
Lack of specimen or large material	12.1
Takes too long to load orders	9.5
Unable to meet short notice request	6.3

^zChi-square with 6 degrees of freedom significant at 0.05 probability level ($\chi^2 = 16.75$).

Table 7. Opportunities for plant producers to help horticultural distribution centers.

Opportunity area	% Response ^z
Marketing support	21.3
More frequent delivery of product	19.8
Meet commitments for booked product	18.0
Improved plant quality	13.1
Provide up-to-date availability	13.1
Do not compete with your distributor	9.8
Label plants with bar code	4.9

^zChi-square with 6 degrees of freedom not significant at 0.05 probability level.

the differences were not significant. The most frequently identified area was marketing support (21.3%), followed closely by more frequent delivery of product (19.7%) and meeting commitments for booked product (18.0%) (Table 7). The respondents did not provide specifics on the desired type of marketing support. This would be an area of follow-up for growers due to the strong interest expressed by HDCs. HDCs book product ahead of delivery schedule, but appear to be disappointed in the ability of growers to deliver committed product. The request for more frequent delivery of product may be an indication that HDCs are more carefully managing inventory turnover and want to enhance plant quality (fourth rated opportunity) by minimizing the holding period for plants. Three additional opportunities for growers to assist HDCs were the supply of product availability sheets (13.1%), avoid competing with your HDC (9.8%), and label plants with bar code (4.9%).

HDCs were asked to identify the most common complaints (Table 8) received from their customers (primarily landscape contractors) regarding plant material or services. These complaints can be used by other HDCs to benchmark complaints or by growers to determine priority services and plant attributes to improve upon. The response rates among identified complaints were significant ($p < 0.05$). The two most frequently received complaints, identified in over 20% of the responses, were prices too high (23.8%) and inconsistent availability of products (20.6%). The inconsistent availability of product can hurt future demand if landscapers can not depend on a supplier. This could be an important area for cooperation between HDCs and growers. The identified lack of specimen or large material (12.1%) may be one specific opportunity area for growers. About 28% of the complaints

Table 9. Changes horticultural distribution centers plan for their business over next five years.

Business change	% Response ^z
Expanded plant product line	25.4
Improved customer service	14.3
Improved on-site sales service	13.0
Increased production (growing) capacity	13.0
Enhanced delivery service	11.1
More hardgoods	9.5
More interaction with customers	7.4
Supplier set-up and pricing	6.3

^zChi-square with 7 degrees of freedom significant at 0.01 probability level ($\chi^2 = 26.61$).

were related to plant quality (15.6%) or specifications (12.1%) and appear to be an area where HDCs need to understand customer expectations and convey these expectations to growers. About 15% of the complaints were related to responsiveness of the HDCs, including time to load orders (9.5%) and ability to meet short notice request (6.3%).

To better understand the future needs of HDCs, they were asked to identify business changes planned over the next five years (Table 9). The differences in response rate among identified business changes were significant ($p < 0.01$). The two primary areas of change identified were in product line and service. Plans to expand the plant product line were identified by about 25% of respondents (Table 9). About 46% of the responses were associated with improved service to customers including improved customer service (14.3%), more on-site sales service (13.0%) enhanced delivery service (11.1%), and more interaction with customers (7.4%). It appears that service to the customer is the area of focus for HDCs over the next five years. Improved service is one way to enhance the perceived value of HDC products and perhaps improve market share and/or profit margin. The other two areas of identified business changes were offering more hardgoods (9.5%) and supplier set-up and pricing (6.3%).

The information in this study provides valuable insight for suppliers, especially plant producers, to horticultural distribution centers. The information can be used to formulate marketing plans, plan product lines, and formulate services

offered to HDCs. One area of focus for growers should be the supply of consistent quality plants. Growers need to update their product line over the next five years as HDCs anticipate greater need for larger size plants, more color, and more container plants, especially trees. In selecting services offered to HDCs, growers should focus on marketing support and ensure timely delivery of committed product.

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