Repositioning *Syringa meyeri* as a profitable dual-use flowering plant

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Significance to industry

Plants, similar to durable goods, undergo a progressive movement through the stages of the product life cycle. Flowering potted plants ($822 million), a subdivision of floriculture ($4.88 billion) have reached a mature stage in the product life cycle. At this stage, sales are flat and profits, in relation, are marginal. Perceptual mapping studies indicated that of fifteen test species, consumers viewed *Syringa meyeri* as a favorite landscape plant. Repositioning a flowering shrub such as the dwarf Korean lilac as a dual-use plant can benefit both the grower and the consumer. For the grower, repositioning a woody perennial as an indoor flowering potted plant creates a product that is potentially disposable. For the consumer, it creates a way to have a plant, which is normally too large, in their home. Added benefits are seen by the consumer if the lilac is planted outdoors, thus serving a dual use.

Nature of work

Growth in the wholesale value of flowering potted plants has slowed to 1.4% growth annually. Within the category of flowering potted plants, specific examples of stalling or a decline in growth are evident. African violet (Saintpaulia ionantha H. Wendl.) declined in value from $25 million wholesale value in 1995 to $18 million in 2000 (34% decrease) and florist azalea (Rhododendron sp. L.) decreased in value from $57 million in 1995 to $55 million in 2000 (15% decrease).

One research method that could help marketers reposition flowering shrubs as new flowering potted plants is perceptual mapping. A perceptual map gives marketers the ability to see in a two-dimensional space how consumers think about products. Knowing what interests the consumer about a product gives the marketer an opportunity to influence purchase habits.

Two Internet-based surveys were conducted in June 2002 to quantify consumer uses of, preferences for and perceptions of three traditional indoor flowering potted plants, six herbaceous plants and six traditional woody flowering shrubs. Appearing in both surveys were three traditional flowering potted plants and six different herbaceous plants and flowering shrubs. Each survey included nine plants in 36 different comparisons. A total of 239 responses were collected for Survey 1 and 239 responses were collected for Survey 2. Participants were asked to evaluate on a scale of one to seven how similar they perceived the pairs of flowering plants to be. When pairs were similar, they received a rating of 1; when dissimilar, they received a rating of 7. Participants' judgments of similarity were transformed into distances represented in a multidimensional space. Plants were clustered on a grid in relation to their rating of similarity/dissimilarity.

Results and discussion

The average respondent was female in both Survey 1 (90%) and Survey 2 (58%) with some college education, and an annual household income ranging from $25,001 to $50,000. Respondents were very close to the household income and education level of the average American. Respondents from Survey 1 had a mean age of 42.5 years, while those in Survey 2 had

a mean age of 35.2 years. The respondents in both surveys were similar in four of the five demographic characteristics and could be considered comparable. The remaining characteristic that differed was average education level, which was higher in Survey 2 (21% completing a bachelor's degree). This may be attributed to the lower mean age of respondents in Survey 2. In both surveys, the greatest portion of respondents were from two person households (60-65%) with zero children in the home (51-53%).

Participants were asked their preferences for indoor/outdoor use, flower-color, and whether or not the plant would be given as a gift. Participants were able to make multiple choices per question. Survey 1 contained three traditional flowering potted plants (azalea, florists' hibiscus and florists' hydrangea), three flowering shrubs (hardy hibiscus, weigela and dwarf Korean lilac) and three herbaceous plants (delphinium, euphorbia, laurentia). The participants' favorite plants to place only outdoors was: dwarf Korean lilac, hardy hydrangea and florists' hydrangea with 72%, 66% and 59% of participants choosing these plants, respectively. Within the survey categories, some participants selected plants for both indoor and outdoor use. The top three plants that could most likely be repositioned as good in the home and garden were: azalea (28%), weigela (27%) and a tie for third with laurentia and florists' hibiscus both receiving 26% (Table 2). The colors most favored by participants were pink (azalea, 28%) and blue (delphinium, 28% and laurentia, 25.1%).

In addition to the same three florist plants used in Survey 1 (azalea, florists' hibiscus and florists' hydrangea), Survey 2 included three flowering shrubs (hibiscus, itea and French hybrid lilac) and three herbaceous plants (campanula, geum and sisyrinchium). The plants most favored for outdoor use were hardy hibiscus (65%), French hybrid lilac (64%) and sisyrinchium (60%). The most common plants chosen for indoor decoration only were geum (49%), itea (38%) and florist hibiscus (35%). Of the plants selected for both indoor and outdoor use, azalea was among the most preferred (33%) followed by florists' hydrangea (42.2%) and florists' hibiscus (26%) (Table 3). Similar to the first study, blue and pink colored flowers were most preferred by the consumer. The two blue flowering plants highly favored in this study were French hybrid lilac (22.7%) and campanula (20.6%). The pink azalea was ranked third at 19.9%.

A perceptual map is depicted in two dimensions, indicating the two most significant attributes of the objects, which were derived subjectively by researchers. Two perceptual maps were developed, one from each survey containing six unique plants and three plants common to both. Plants appeared in each of the four quadrants, indicating the range of products included in each survey. As Kelley et. al (2003) found in their survey, the major dimensions appeared to be a plant form (x axis) and flower color or shape (y axis) for Survey 1 and Survey 2. Plants that clustered closely together were similar in plant form and flower color/shape. Survey participants most likely would consider these substitutes or replacements for each other. Plants appearing in isolation in quadrants were considered most distinct from the group in form and flower shape/color. These unique plants may possess the greatest profit potential because they are differentiated from others in the product set. Consumers may value the ability of planting an indoor flowering plant outdoors in their garden. If so, these plants could be repositioned to restart sales and generate profits. The dwarf Korean lilac is a plant that has a great potential to be repositioned. The familiarity of the general public with a lilac plant in addition to the fragrance of the lilac might be an added value for which some consumers are willing to pay. Results of this research also identify other flowering shrubs such as the outdoor hydrangea, weigela, and the French lilac, which also have the potential to be repositioned as profitable crops.

Table 1. Plants used in Survey 1 and Survey 2.

Scientific name	Common name	Shown on survey(s)	Type of plant	Hardiness zone(s)	Flower color
Campanula carpatica Jacq.	campanula	2	Herbaceous	3-8	purple
Delphinium grandiflorum L.	delphinium	1	Herbaceous	3-7	blue
Euphorbia milii Desmoul.	euphorbia	1	Herbaceous	9-11	cream
Geum coccineum Sibth and Sm.	geum	2	Herbaceous	3-7	orange
Hibiscus rosa-sinensis L.	florists' hibiscus	1, 2	Woody	9-11	rose
Hibiscus syriacus L.	hardy hibiscus	1	Woody	4-9	pink and purple
Hydrangea macrophylla Siebold	florists' hydrangea	1, 2	Woody	6-9	pink
Hydrangea paniculata Siebold	hardy hydrangea	2	Woody	3-8	white
Itea virginica L.	itea	2	Woody	5-9	creamy yellow
Laurentia axillaries Lindl. (E. Wimm.)	laurentia	1	Herbaceous	7-8	bluish purple
Rhododendron hybr.	azalea	1, 2	Woody	7-9	pink
Sisyrinchium tinctorium H. B. & K.	sisyrinchium	2	Herbaceous	5-8	yellow
Syringa meyeri C. K. Schneid	Korean dwarf lilac	1	Woody	3-8	purple
Syringa x hyacinthiflora (Hort. Lemoine) Rehd.	French hybrid lilac	2	Woody	3-8	light purple
Weigela florida (Bunge) A. DC.	weigela	1	Woody	3-8	red

Table 2. Of those who responded to the question, the percentage of Survey 1 respondents who expressed a preference for use location for each plant.

		Use location	
Plant	**Outdoors**	**Indoors**	**Both places**
Azalea	39	33	28
Delphinium	49	28	23
Euphorbia	21	62	18
Florists' hydrangea	59	24	18
Florists’ hibiscus	44	31	26
Hardy hydrangea	66	25	9
Korean dwarf lilac	72	13	15
Laurentia	52	22	26
Weigela	36	37	27

Table 3. Of those who responded to the question, the percentage of Survey 2 respondents who expressed a preference for use location for each plant.

	Use location		
Plant	**Outdoors**	**Indoors**	**Both places**
Azalea	35	32	33
Florists' Hydrangea	41	31	28
Florists' Hibiscus	39	35	26
Campanula	46	30	25
Geum	33	49	18
Itea	44	38	18
French hybrid lilac	64	18	18
Hardy hibiscus	65	20	15
Sisyrinchium	60	26	14