customer needs and our service to them. We do listen to our customer needs and are influenced by the market, trade shows, trips, and consultants that we use frequently. Our sales area ranges from Washington, D.C. to Florida, to Texas, and in between. Each has its own special needs, climates, and requirements that we fit our program of plant selections around.

We do the best possible job to assure we have the most transplantable material that can be bought. We believe reliability and uniformity help sell our product. In the end, we do not sell plant material, we sell satisfaction.

Now, I would like to end by asking you a question. I am looking for a tree: 30 to 40 ft., small leaves, early shed, beautiful bloom, fall color, fast growing for sun control, shade in the summer and sun in the winter? Does anyone have such a tree?

FORECASTING FOR PURCHASING

AL FRITZ

Shemin Nurseries, Inc. P.O. Box 355 Burtonsville, Maryland 20866

Shemin Nurseries, Inc. is a joint venture with Weyer-haeuser Co., Inc., Tacoma, Washington. In 1979 Emanual Shemin joined with the Weyerhaeuser Company in a venture designed to expand Manny's original unique concept of a "one-stop horticultural distribution center". From 1963 to 1979 Shemin's was a wholesale-retail center in Bronx, New York and later was changed to strictly wholesale in Greenwich, Connecticut.

With the financial backing of a committed international company, expansion of this concept began in the fall of 1980 with the purchase of property in the Washington, D.C.-Baltimore, Maryland area. Centers were soon added in Atlanta, Georgia, in spring of 1981; Chicago, Illinois in 1983; Detroit, Michigan, Miami, Florida and Aalsmeer the Netherlands in 1984. Philadelphia, Pennsylvania in 1983; Toronto, Canada and Boston, Massachusetts will follow in 1986. Future plans include many other major cities. Each site is from 22 to 40 acres of fully-automated irrigated beds.

Forecasting purchasing on this scale is a tremendous undertaking. At present one full-time and one part-time person purchase more than 2000 trailer loads of live nursery stock, including bareroot, container, and balled-and-burlapped stock. Purchases are distributed as follows: 600 trailer loads to Con-

necticut, 500 to Maryland, 375 to Atlanta, 250 to Chicago, 100 to Detroit, 75 to Philadelphia, and 150 to Toronto. Sites in Florida and Holland are foliage sites.

A 10-year-old facility, which we consider a mature operation, will sell in excess of 600; 5 to 6 year old sites, 500; 3 to 5 year olds sites, 250 to 375; and 1st year centers, 75 to 100 trailer loads per year.

So you see, in order to forecast our need for this amount of material we must ask ourselves a number of very important questions.

The first is: What is our business plan? What do we propose to do in sales in each of the sites that are functioning, and what are our plans for future sites? If we assume that the seven functioning sites will grow at a conservative rate of 75 to 100 trailer loads per year and that the new Boston site will use about 75, we will need 525 to 675 additional trailer loads next year. Any unforeseen new acquisitions or quick start-ups that are not necessarily in the plan will, of course, increase requirements even more.

The second question is: What is our market? We must consider the characteristics of the area as well as the primary activity of our customers themselves. Is the area heavy in can production, such as Atlanta; or are we in a heavy B & B producing area, such as Maryland? Will our customers be accustomed to going directly to these local growers?

And what about our customers? Are they landscape contractors, property managers, builders, or government agencies, who traditionally use larger B & B material? Are they garden centers or mass merchandisers who use smaller B & B and cans?

We must also ask, "What is in fashion? What are the hot items in greatest demand? Leyland cypress, perennials, gumpo azaleas, hemlock, upright or blue hollies? What has fallen out of fashion?" For example, many landscape architects used Kwanzan cherry one year and Yoshino cherry the next.

Another factor in fashion is related to hardiness. Raphiolepis is popular in the South, Nandina in the mid-Atlantic, and certain *Ilex* cultivars in the Northeast. Consumer acceptance, or acceptance based on semi-hardiness, are strong influences on forecasting.

It is also essential that we consider our supply sources. What is the supply locally, regionally, and nationally? Who do we depend on? Can our usual suppliers keep up? Do we need more supplies?

Let us begin with the case where material is in short

supply. We first look to our regular suppliers, knowing that they have a reduced length and breadth of supply. The first question we ask is: Can we at least get our fair share? Then, what are our tools to ensure this supply?

- 1. We pay our bills on time.
- 2. We can pre-pay deposits.
- 3. We commit early.
- 4. We honor our commitments (even when fashion changes saleability).
- 5. We try never to take unwarranted credits.
- 6. We can take large amounts of materials that a grower may be long on to help balance his inventory.
- 7. We try to take a broad-based product mix.

We must be cautious in our approach and commitments to new suppliers. Because of the tight supply, the growers are in the so-called driver's seat, leery of one-time business, leery of our insatiable appetite for goods. "Shemin can use your whole production!" We must impress on them a number of key points:

- 1. We know that we are "johnny-come-lately" and that they have a loyalty to and long-lasting relationships with previous customers.
- 2. We do not want to be every grower's largest customer.
- 3. We want to start on a trial basis working toward a mutually beneficial arrangement.
- 4. We want the grower to plan with us and grow with us as we expand.

Let us also look at our procedure when plant material is in overproduction. With our regular suppliers we must continue our relationships:

- 1. We should not be concerned only with price, although the price must be in line with the market.
- 2. We should continue to purchase, especially from those who were fair to us when shortages were prevalent.
- 3. We must be aware that, although the shoe is now on the other foot, unfortunately for both the grower and us, the cycle will swing back again.

We must gauge this carefully and be very conservative with new suppliers so as not to fail to take our fair share from those who helped us.

How do we assess our market? Frequent trips into the marketplace give us our best view. Each grower that we use is

visited at least once each year. Larger growers in terms of volume may be seen 3 or 4 times. We make many trips into the local areas surrounding each site for local growers. These trips will give us a good overview of what is in production and improve our sensitivity to the market.

How do we assure ourselves of adequate purchases? We do it by knowing the business trends. Are single family or townhouses the trend? Is the area commercial or residential? Will there be new plantings in growth areas like Atlanta and Maryland, or replantings as in Connecticut? We make sure to keep our relationships with our vendors on an even keel. We pay constant attention to the supply side. What is ready now? Should we arrange contract purchasing and, if so, how far ahead? What items should be contracted — specialty items, bread-and-butter, or novelty items? We assure adequate purchases by making our commitments early and taking what we commit to. We do it by making sure that although it's of primary importance to us that we make money, it is also important that our suppliers flourish and make profit.

How can we help the grower? Specifically, I feel we are obligated to pass on market trends, fashion, and changes in customer types. We should work together toward making the market drive production, bringing a sense of order, rather than allowing production to drive the market. When production drives the market, price cutting is the result, which is disastrous for both the grower and the wholesaler.

In summary, in order to forecast purchasing you must know the following:

1. Your business plan.

- 4. The available supply.
- 2. Your market and customers. 5. The tools needed to assure

3. The current fashion.

adequate purchases.

PLANT MODELING: DEVELOPING AN APPROACH¹

FRED T. DAVIES, JR.

Department of Horticultural Sciences Texas A&M University and Agricultural Experiment Station College Station, Texas 77843

WHAT IS PLANT MODELING?

Webster defines a model as information, data or principles which are arranged or grouped mathematically. The algebraic formula y = mx + b, which is used to fit a straight line, is a

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