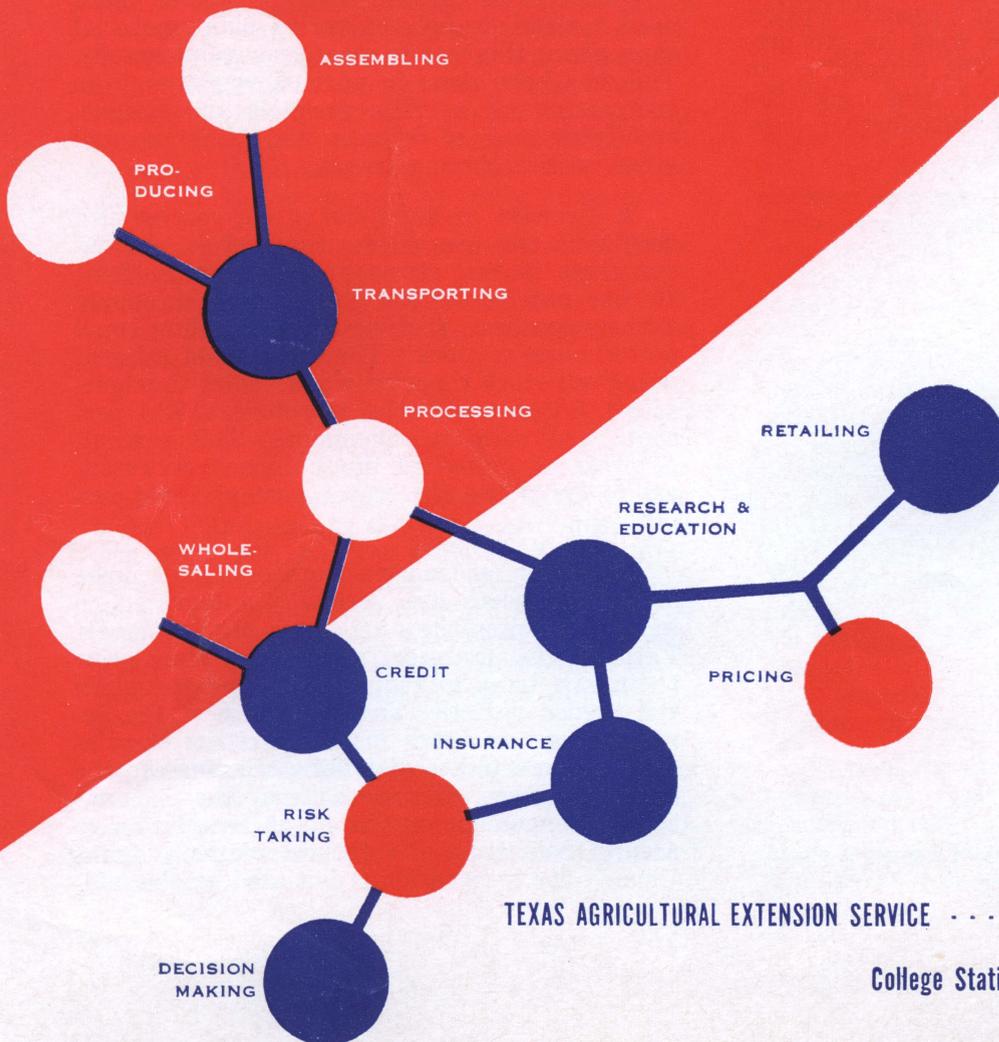


# VERTICAL INTEGRATION

## IN TEXAS AGRICULTURE

### Nursery Crops

The nursery business is highly specialized. Throughout its history, the owner-grower has had to perform all the activities of planting, growing, packing and marketing nursery products. The rapid increase in demand for nursery products has called for specialization in production. One problem confronting the industry is whether integrating vertically would result in a more profitable and efficient business.



H. B. SORENSEN  
Associate Professor  
Department of  
Agricultural Economics

A. F. DEWERTH  
Head  
Department of  
Floriculture and  
Landscape Architecture

The Texas A. & M.  
College System

TEXAS AGRICULTURAL EXTENSION SERVICE . . . TEXAS AGRICULTURAL EXPERIMENT STATION

College Station, Texas

### *Types of Nursery Integration*

The nurseryman has several opportunities for specialization. When his plants are at the market stage he may sell to wholesalers who distribute them to retailers; he may wholesale to retailers himself; or he may retail them directly to the consumer.

An analysis of the marketing channels for nursery crops by the United States Department of Agriculture indicates, in terms of retail values, that 23.7 percent of the consumer purchases are made from the retail grower, Figure 1. This is a form of vertical integration that has been carried on for some time but which has received little attention.

Vertical integration may operate in the nursery industry in several ways.

1. National advertising and sales programs are conducted by large national general retail merchandising chains in their catalogues. These national chains have a contract with the nurseryman to supply, package and mail certain plants of specific size at a specified price. The nurseryman determines what he can produce at a specified price. The national chain advertises, accepts the orders and backs the sale with its reputation and "satisfaction guarantee."

2. In some cases in the Texas rose industry, in the Tyler area, a prepackaged rose whole-

saler will contract with the rose grower to supply a specific number of various varieties of rose bushes or rose seedlings. Under this arrangement the rose grower agrees to deliver the specified quantities to the packingshed at the time requested.

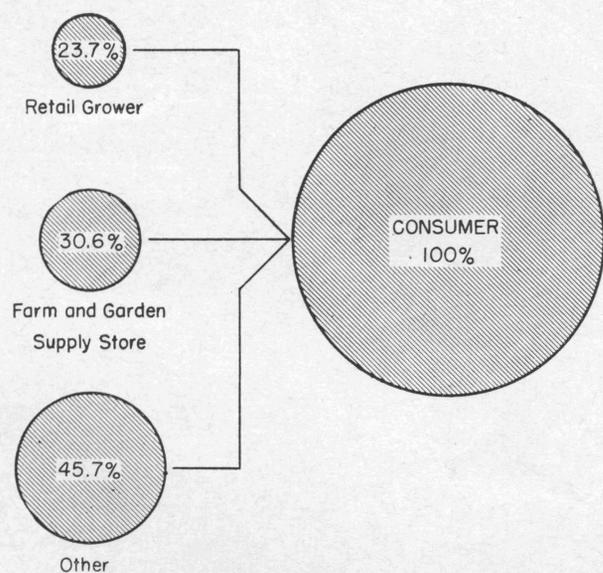
3. Nurserymen who retail their own plants sometimes provide landscape service to their customers. In doing so, the nurseryman is performing another function. In other cases, the independent landscape designer may work with a nurseryman who maintains a supply of plants the designer uses and plants them under the designer's direction.

4. Some nurserymen are connected with garden centers or sales yards. Sales channels of growers having a sales value of \$25,000 or more reportedly are: sales to wholesalers, 2.4 percent; sales to retailers, 45.3 percent; and sales to consumers, 52.3 percent. Apparently these growers are accustomed to dealing with retailers.

Operators of garden centers and sales yards need a steady supply of varied plant material throughout the year to meet seasonal demands. This has been done in various ways, such as contracting for specific varieties and volume, specifying date of delivery and financing and other vertical arrangements.

5. Growers of lining-out stock, rose stocks, deciduous and evergreen ornamentals, deciduous fruit stocks, citrus and subtropical fruit stocks, may be vertically integrated to supply various retailers, such as those handling small potted nursery stock. The channels of sales of lining-out stock reportedly are: sales to wholesalers, 5.1 percent; sales to retailers, 72.1 percent; and sales to consumers, 23.8 percent. Growers of lining-out stock depend on retailers to distribute the major part of their output.

6. Citrus grove-care-operators and large citrus producers are vertically integrated to include the production of citrus nursery stock. Large citrus producers report that they grow their own trees to reduce costs and to obtain the needed varieties and quantities at the desired time. In other instances citrus associations are created to distribute seedlings to the citrus producer. This is done by the packingshed management or the citrus association to assure themselves of a future volume of fruit. Usually the integration is initiated by the mid-



**MARKETING CHANNELS FOR NURSERY CROPS**  
Retail Values

# N IN TEXAS AGRICULTURE

## ry Crops

dleman with the citrus nurseryman to obtain the desired variety, quantity and quality of trees at an agreed price or by the citrus producer to supply known varieties of trees that assured volume of fruit to pack.

7. There is some vertical integration in city park systems. This type permits such systems to produce their own nursery stock to reduce costs and to assure a supply at the desired time.

### *Extent in the U.S. and Texas*

Texas ranks second to California in the wholesale value of sales of both ornamental plants and lining-out stock. Texas sales of ornamental plants amounted to 9.2 percent of total U. S. sales while California sales were 15.9 percent. Texas sales of lining-out stock amounted to 9.8 percent of the total; California sales, 10.9 percent.

Five Texas counties had sufficient sales volume in 1949 to place among the top 100 U. S. counties. Smith county, which ranked second in the nation, is primarily a rose-producing area. Other high sales volume Texas counties include Tarrant, 27th, Cherokee, 54th, Van Zandt, 59th, and Hidalgo county, 87th. The nurseries in Hidalgo county, are devoted primarily to the production of citrus rootstock.

Texas nursery certificates issued between 1920 and 1956, by type of nursery are shown in Table 1. In 1956, 308 wholesale-retail nurseries and 639 nursery-floral companies had certificates.

### *Management Practices*

Under the contract system of production, many management decisions are shifted to someone other than the grower. For example, when roses are grown under contract, the rose grower can expect the contract to stipulate at least one or more of the following: the variety, when to dig, the number to deliver on a specified date, the price and the total quantity to produce.

However, the rose grower has a guaranteed market and for this guarantee the buyer expects a product of uniform quality in a specified quantity and delivered at the specified time.



Field view of santolina.

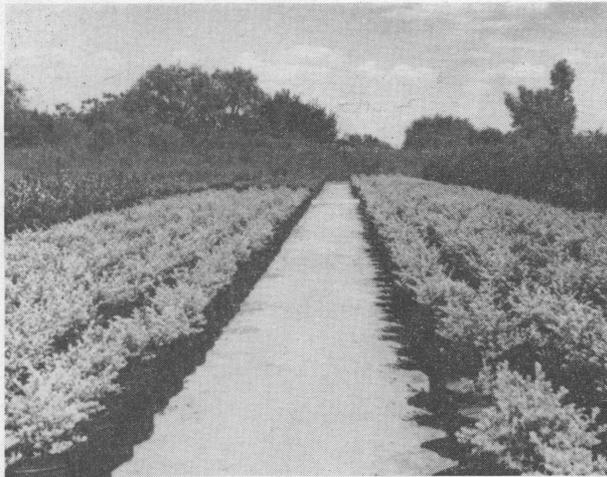
### *Growth*

In general, the purchases of nursery stock expands rapidly as personal real income increases, and decreases as real incomes decrease. With prospects of continued home building and the development of large shopping areas near new suburbs, the demand for nursery products should remain high. Retail sales yards, garden centers and large retail chains will continue to handle nursery products. They will have to have a specific volume and variety to be delivered at a given time, to please the consumer. Recent Texas studies indicate that to maintain year-round sales and continued interest, the variety of plants should change seasonally. Therefore, these businesses may integrate in some manner to maintain a basic selection of plants with variations in volume.

### *Cautions and Opportunities*

The nurseryman should study carefully any proposed arrangement involving vertical integration to determine its probable effects on his business. A nurseryman in joining a cooperative or private venture should realize that he is entering into a contract significant to his business operations.

Vertical integration with another business necessitates that the nurseryman keep cost records on both the production and marketing phases of his business so he can make proper managerial adjustments. Thus, vertical inte-



Leucophyllum packed in 5-gallon cans.

gration may benefit the nurseryman by allowing him to be better informed of his costs through making it necessary that he keep accurate cost records. It also reduces the amount of risk he formerly had to bear when he retailed plants himself.

### Advantages

1. The financing arrangements usually associated with vertical integration help the nurseryman to obtain more capital, improve his facilities, expand his operation and reduce risks.

2. Vertical integration often includes provisions for technical assistance and advice which help reduce production costs, improve quality and standardize the products.

### Disadvantages

1. Unless the nurseryman personally integrates his operation, any increases in returns resulting from increased efficiency may not be shared by him.

2. Nurserymen may be forced to increase the scale of their operations to make the best use of labor-saving equipment and to utilize their resources fully.

Table 1. Types of Texas Nursery Certificates Issued During 1920-56

Type of nursery	1920	1931	1935	1949	1956
Wholesale <sup>1</sup>	5	—	—	—	98
Wholesale-retail	130	227	470	—	308
Dealer-salesyard	113	—	280	365	635
Nursery-floral <sup>2</sup>	18	221	125	—	639
Wholesale roses	—	81	81	298	240
Retail general line stock <sup>3</sup>	—	—	11	99	—
Pecan stock	—	15	3	9	1
Small fruits	—	25	26	8	—
Citrus	—	184	4	102	—
Propagation	10	18	8	—	—
<b>Total</b>	<b>276</b>	<b>771</b>	<b>1008</b>	<b>892</b>	<b>1921</b>

<sup>1</sup>Wholesale nursery—all except roses.

<sup>2</sup>Nursery and floral—wholesale, retail, nursery and florists; wholesale nursery florists and retail, nursery and florist.

<sup>3</sup>Retail general line—fruit stock, ornamentals, evergreens or any combination.

\*Source: Nursery bulletins, Texas Department of Agriculture.

3. The individual operator loses his chances of taking advantage of a seller's market.

4. The risk from expansion investments are figured on a long-time basis and contracts usually are for a short time.

Vertical integration is the linking together of two or more stages of production, processing or marketing activities under one management. The key feature of vertical integration is the centralization of decision-making, risk-bearing and supervision.

This is the seventh leaflet in the series "Vertical Integration in Texas Agriculture." Similar releases on crops and other livestock important to the Texas economy will follow.

By bringing together current knowledge and practices on vertical integration in Texas agriculture, the staffs of the Texas Agricultural Extension Service and Texas Agricultural Experiment Station in the Department of Agricultural Economics and Sociology hope to help you make wise decisions in this matter.

*Tyrus R. Timm*

Head, Department of  
Agricultural Economics and  
Sociology