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# An Overview of a Computerized Production Program

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How does a complete software package for the horticulture industry work? What are the basic components and concepts that need to be understood to purchase and implement a successful package? In this paper we will look at these basic questions and attempt to answer them by using First Step Greenhouses and Plant Partner as an example.

First Step Greenhouses is a new annual bedding plant plug operation in Southern California. We use Plant Partner software from Starcom Computer Corp. to drive our business. The software handles many different functions including order entry, production planning, inventory control, shipping, production scheduling, and material needs.

For purpose of discussion we will divide the functionality of the software into two topics, sales and production. Sales deals with orders, item pricing, inventory, order collection, and shipping. The first step is to develop a sales catalog. This is a detailed profile of each item for sale including: container used, genus, variety, color, price, plant count per container, location grown, and sales window.

After the items are defined in the sales catalog and individual customers are setup, you can enter in specific orders. Information in orders identify the customer, ship date, purchase order, and shipping method. The order also details each item on order, the quantity, and pricing. You can also enter unique messages specific to the order or to individual items in the order. Reports such as packing slips, invoices, and sales history can then be run.

A master pick list is generated by the program to aid in order collection. This report lists all orders for the day or week. It is sorted by container, variety, then by customer's order. This helps speed collection by only going to that crop once and picking what's needed for all orders. The report also contains inventory information for each item; this helps to identify any shortages and prevents wasted time looking for nonexisting items.

The inventory function enables the user to track items from time of planting or purchase through to shipping. Inventory is first entered as a planted, initial, or purchased inventory. During the course of the crop numbers are deducted for spoilage and losses due to culture. Items on orders are then deducted from inventory as a committed quantity. Mathematically this is how it works: (beginning Inventory — spoilage or loss) = on hand quantity; (on hand quantity — committed or ordered

quantity) = available quantity. So at any one time you can run a report that details what is available at your facility. First Step Greenhouses also uses barcode labels on each unit and a handheld scanner to facilitate inventory data collection. Tracking inventory also enables the user to review his success rate with specific crops (i.e., losses in rooting) and assures you are selling inventory you have.

A production schedule can be derived two ways with Plant Partner. The user can develop a plan from projected sales or can schedule based on actual orders in the system. When scheduling from anticipated sales the user determines the total quantity of a container size needed for each sales week. This number is then divided and divided again based on percentages of each item desired. This is a form of hierarchy that flows as follows: container_genus_species or series_color. For example, starting with the total container number of X this is divided as follows; 10% of X is *Impatiens,* 50% of the *Impatiens* are Super Elfin, 4% of the Super Elfin will be white.

The other way of scheduling is based on orders in the system. The program scans all orders and calculates when the item needs to be planted based on crop times. The number is then increased to account for a given spoilage percent anticipated. You can then run reports telling what items need planting on a given week.

The production side has an equivalent to the previously described sales catalog; it is called the production library. The user inputs information critical to production of the crops in this library. Each crop has its own card containing data relevant only to that crop. Information contained includes: crop times, number of cells or plants in the container, anticipated spoilage percent, and tasks and materials needed to produce the crop. Partitioning the year into different segments creates crop times. This helps to overcome weather and production time changes created by it. For each segment of the year you can define different crop times, sell windows, spoilage percents, materials, and tasks.

Once production is scheduled, reports are available to facilitate production. Reports available include sow sheets and material usage and labor needs.

In the authors opinion it is critical to have a program that integrates both the selling and producing functions of the business. This enables a healthier tighter link between these two often divided and embattled departments of the business. One must also realize that any software package developed for our industry will not run like Microsoft Office. The user should anticipate problems or "bugs" since the software company is operating on limited funds from a limited customer base. Be prepared to have yourself or an employee be the babysitter or "guru" of the system. The initial time investment to set up a system can be significant, but the rewards are also.

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# Question and Answer Period: Concurrent Session I: Perennials and Plugs

**Mary Helen Seeger:** Is there a way to integrate sales via computer modem or the Internet?

**Martin Stockton:** Not that I know of, but they can probably develop a custom program to handle that. That gets back to the concept of small industry, if you want to be an innovator or fore-runner you will likely pay for it.