



Retail Reflection\$

Retailing Vegetable Transplants

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Every grower-retailer should offer vegetable transplants because they are an essential component of the profitable bedding plant mix. Many consumers who aren't interested in ornamentals can identify with vegetable plants because they represent food. Whether they grow a couple of tomato plants or a large garden, people want to feel a connection with the land, and growing vegetables provides a sense of self-sustainability. Producing vegetables also gives landowners a grand sense of accomplishment.

Apartment dwellers also seek out vegetable plants for their patios. These dabblers are typically the Gen-Xers or from Generation Y. Chances are their parents, the baby boomers, grew their own vegetables, or they remember going to their grandparents to pick vine-ripened tomatoes and bushels of green beans. Fresh vegetables and the good times that surround them evoke memories of childhood. Gardening brings back the sweet smells and tastes of summer that antiques and photographs cannot.

Taste and freshness are important for homeowners growing their own vegetables. Doesn't it just taste better when you grow it yourself? It is kind of like cooking hot dogs and mac and cheese; the quality may not be the best, but it tastes better than a microwave dinner, because you created it yourself. That first sweet and juicy slice of watermelon from your garden was a result of your own blood, sweat and tears. Pride in growing can also be seen when gardeners provide the fruits of their labor to their friends and family, and it sure is important to keep those neighbors happy.

Organic and sustainable vegetable gardening continue to grow in popularity with home gardeners. Consumers who want to enjoy pesticide-free produce can control chemical inputs by growing their own vegetables. That inherent satisfaction of eating "safe" food is appealing to everyone.

Production Pointers

According to HGTV, the top ten most popular vegetables grown by home gardeners are tomatoes, peppers, beans, cucumbers, onions, lettuce, squash, carrots, radishes, and sweet corn. This list should help govern the vegetable transplants you offer, although it may not seem sensible to offer radish or carrot transplants, as these are traditionally sown directly

into garden soils. Other summer favorites include watermelon and cantaloupe. Don't forget the cole crops like cabbage, broccoli, and cauliflower. Surveys or questionnaires may be necessary to discover local favorites such as onion, okra, and celery. If there is no market, don't grow it! There is no sense in sowing corn and beans in flats until you have an idea of the local market, since farmers' markets and roadside stands may be common in your area.

We suggest the 10 tomato-5 pepper-2 cucurbit-1 "other" vegetable transplant ratio for grower-retailers with an acre of greenhouse space. Instead of following a typical bedding plant production schedule with three turns, choose to sow smaller groups of vegetables with four to five turns in mind. For example, every two to three weeks, grow 10 flats of tomatoes, 5 flats of peppers, 2 flats of each type of cucurbit (e.g., squash, zucchini, cucumber, muskmelon), and 1 flat of odd crops such as cole crops or warm season vegetables (eggplant, okra, watermelon). A good mix of solanaceous crops would include several types of tomato (cherry, Roma, grape, beefsteak, and early), and bell, banana, and hot peppers.

How to produce a marketable vegetable transplant:

1. Select a plug tray that produces the plug size you want. Larger cells may be more appropriate as they provide the plant more time to grow. For example, tomatoes could be sown in a 200 cell tray for packs, a 128 for 4-inch pots, and a 98 or 72 tray for 6 inch pots. Cucurbit crops like squash and cucumber should be sown in 72-cell trays or smaller.
2. A warm environment expedites the germination process, especially early in the production cycle. Use bottom heat to decrease the germination time, or construct a germination chamber, or use plastic sheets to cover trays of germinating seeds.
3. Fertilize seedlings when the first true leaves appear. A sample fertilization regime for tomatoes is suggested by Douglas Cox of the University of Massachusetts, who uses a growing mix that contains a starter charge, with fertigation applied twice weekly with a low phosphorus fertilizer such as 20-0-20 at 150 ppm N. Cox also suggests using a complete fertilizer like 20-10-20 in the finishing stage.
4. Vegetable transplant production can be quite challenging, because most species grow rather vigorously. The big problem occurs when cold weather sets in and transplants have to be returned to the greenhouse. Unfortunately, the transplants grow from seedlings to trees in about a week. High light and cool temperatures are essential in maintaining compact vegetable transplants, but temperatures below 50°F can cause damage. Foliage purpling can be used to indicate the onset of cold injury on tomatoes and sweet corn. Cold-frames and roll-up houses are ideal for protection and hardening off.
5. Inevitably, vegetable transplants will begin to stretch, even when grown outdoors. Repotting tall plants may require too much labor during peak spring sales. Know when to

throw out poor quality plants. If you grow them robust and you grow them in proportion to the container, you can potentially sell them all.

What cultivars should you grow? Every year, new All American Selections winners are chosen, but there will always be the tried and true cultivars that consumers ask for by name. In order to provide some regional favorites, we conducted a survey of 15 to 20 growers in seven regions of the U.S. The survey asked grower-retailers about their most popular solanaceous, curcurbit, and cole crops, and asked them to comment on vegetable transplant production and marketing. The report is featured on the Retail Reflections website at <http://www.ces.ncsu.edu/depts/hort/floriculture/RR/index.html>. If you would like to complete our survey, there are downloadable forms on the site.

Marketing

Some benefits of offering vegetable transplants for sale include:

- Vegetable transplants are cheap to sow and grow. Additionally, vegetables like lettuce offer a quick reward for the time and labor invested.
- You can offer a one-stop shop for consumers, and an alternative to flowers. Traditional flower gardens do not contain a few hills of watermelons or a row of squash, but maybe they should. Vegetables such as purple okra and red lettuce are beautiful as well as edible. The patch of open space that resists ornamentals can be designated as a spot for vegetables. Promote small quantities of vegetables to gardeners who are having difficulty growing annuals in all-day sun or do not want to invest in a large vegetable plot. This idea can be very useful for new homeowners without mature trees on their lots. Vine crops like cucumbers, watermelons, and pumpkins will fill the void until the homeowner decides on more permanent plantings to install.
- You may be able to establish a niche market with contract production of transplants for small-scale farmers who don't grow their own transplants. Growing heirloom varieties may be a marketing avenue. While heirlooms may not have the disease or pest resistance offered by modern hybrids, their desirable characteristics might outweigh these negatives. Consumers are fascinated by antiques and nostalgia, and they love to associate with "how things used to be". Marketing heirlooms offers unique opportunities for education and a connection with the past. Old-fashioned signs and detailed information about old cultivars is a crucial aspect of marketing heirlooms.
- Vegetable gardening offers something for every member of the family. Men "dig" vegetable gardens. They can't brag about their geraniums or their marigolds, but when a guy starts bragging about his tomatoes or his squash, you can't shut him up. Vegetable gardening offers the male species a challenge, as constant attention is necessary for an immaculate and impressive plot.

To many people, the challenge is to grow the first ripe tomato on the block. To grower-retailers, this means sowing seed in mid-February, committing space with high light and the ability to regulate the temperature. One strategy is to grow them in gallon size fiber pots staked with a 36-inch bamboo rod, to be ready on the first frost-free date. Market these specialty tomato plants as the “community bragger”.

Don't forget the kids. Cultivating vegetables is a wonderful introduction into the world of gardening. It teaches children responsibility and how to tackle challenges, and the harvest rewards them with positive feedback and tangible produce.

- Tie-in sales include herbs and combination plantings for patio gardens. Combination planters, or groupings of plants with a common theme, are good ways to get customers excited about vegetable gardening. A perfect example would be a packaged pizza garden, to include onions, garlic, tomatoes, basil, peppers, and oregano. While considering combinations, you might wish to create a flat or pack of mixed vegetables that include the most popular vegetable species and cultivars.

Employee vegetable gardens are a great investment, although, just like ornamental display gardens, they present a time and maintenance challenge. A small, on-site vegetable garden could serve as both a demonstration garden and a source of produce for employees.

Signage should include basics such as days to maturity, spacing, fertilizer and irrigation requirements, and pest control. Let the foliage sell the plant, but let the signage sell the pack or flat. Signs that picture juicy fruits in vibrant colors are important. Handouts may offer recipes, information on the best varieties for canning, and sources of information on other aspects of vegetable gardening.

Treat vegetable transplants as specialty items. With a little marketing savvy, these common plants can bring you unexpected profits.