

Bedding Plants

Introduction

Hundreds of different annuals, perennials, herbs and vegetable transplants can be grown and sold as bedding plants. A single commercial greenhouse business may produce as many as 500 different kinds of plants in the spring. Some of the most popular ornamental bedding plants include impatiens, petunias, geraniums, pansies, begonias, and marigolds. Tomatoes, peppers, and cole crops are popular vegetable transplants.

Marketing

Bedding plants are as much a marketing business as a production business. Growers must be willing to develop their own marketing strategies and to adjust production to changing consumer preferences. Potential retail markets include farmers markets and direct sales from the greenhouse or farm. Wholesale markets include local garden centers, landscape contractors, discount stores, grocery stores, farm stores and roadside stands.

Market Outlook

Bedding plants are currently the most profitable and fastest growing area of the floriculture industry. Sales of bedding plants have risen sharply over the past 10 years as the consumer demand for landscape and gardening plants increases, a trend that is expected to continue.

Production Considerations

Site selection and planting

A heated greenhouse structure is necessary for producing most bedding plants. Crops requiring short production periods may



be produced in a cold frame or in an unheated greenhouse. Plants are generally propagated from seed sown from late December to March. Most bedding plants are produced in market flats containing pull-apart inserts or packs of one to nine cells each. The inserts are designed to be sold to consumers as a unit and each cell contains a single plant.

One major production decision facing new growers is whether to invest in the equipment necessary to grow their own plants from seed or to purchase transplants (plugs) from another producer. Growers who purchase transplants, rather than growing them in-house, are referred to as bedding plant “finishers”, an option many small to medium growers choose. Growers who purchase plugs may still opt to produce some of the more easily grown crops from seed.

While most growers choose soilless mixes, there is no single best formulation for growing quality bedding plants. The choice of mix can depend on a number of factors including grower preference, cost and type of irrigation. Timing production properly to have a wide assortment of species ready when the market demands



is critical to profitability. Growth retardants are often used to keep plants shorter and sturdier.

Pest management

Greenhouse conditions that favor plant growth also favor the rapid build-up and spread of insects and diseases. Potential disease problems include damping-off, root rots, powdery mildew, fungal leaf spots and impatiens necrotic spot virus. Common insect pests include thrips, aphids, mites and white flies. Prevention and careful monitoring are the keys to insect and disease control. Weed control under benches and around the greenhouse will also help reduce insect pests and disease problems; however, herbicides are not applied in greenhouses.

Post-production

Consumers expect flowering bedding plants to be blooming at the time of purchase. Proper post-production care is essential to maintaining a quality product up until purchase. Plants ready for sale should be kept cool and shaded from direct sun to extend their shelf life. Ideally, plants should be sold within 3 to 5 days after removal from the greenhouse.

Economic Considerations

The production of bedding plants can be a highly profitable venture, with gross sales as high as \$10 per square foot of greenhouse bench space, or typically \$500,000 per acre. However, this is a high risk business with significant start-up costs, as well as demanding labor and management. Initial investments include greenhouse construction, production system costs and equipment. The cost of a production-ready greenhouse, excluding land costs, can run approximately \$10 per square foot.

Production costs and returns vary greatly depending on crop grown, greenhouse size, production system, and marketing strategy. Rutgers has established several sample budgets for bedding plants that take into consideration some of these variables.

More Information

- Controls for Greenhouse Ornamental Insect Pests (University of Kentucky, 2004)
<http://www.uky.edu/Agriculture/Entomology/entfacts/trees/ef421.htm>
- The Greenhouse Business in Kentucky – A Review of Crops and How to Begin a Business (University of Kentucky, 2002)
<http://www.uky.edu/Ag/HLA/anderson/greenhousesinkentucky.pdf>
- Managing the Greenhouse Environment to Control Plant Diseases, PPFS-GH-01 (University of Kentucky, 2004)
http://www.ca.uky.edu/agcollege/plantpathology/ext_files/PPFShtml/PPFS-GH-1.pdf
- Selected Resources and References for Commercial Greenhouse Operators (University of Kentucky, 2002)
<http://www.uky.edu/Ag/Horticulture/anderson/greenhousereferences.pdf>
- Commercial Floriculture Information Center (North Carolina State University)
<http://www.ces.ncsu.edu/depts/hort/floriculture/>
- Commercial Production of Vegetable Transplants, B-1144 (University of Georgia Cooperative Extension, 2003)
<http://pubs.caes.uga.edu/caespubs/pubcd/B1144.htm>
- Floriculture (Purdue University)
<https://sharepoint.agriculture.purdue.edu/agriculture/flowers/default.aspx>
- Greenhouse Costs of Production Budgets (Rutgers Cooperative Research and Extension)
<http://aesop.rutgers.edu/~farmmgmt/Greenhouse/Greenhouse-Index.html>
- Growing and Marketing Bedding Plants, ANR-0559 (Alabama Cooperative Extension, 2004)
<http://www.aces.edu/pubs/docs/A/ANR-0559/ANR-0559.pdf>
- Integrated Pest Management for Greenhouse Crops (ATTRA, 1999)
<http://attra.ncat.org/attra-pub/gh-ipm.html>