

# **PRODUCTION AND MARKETING OF NEW PLANT INTRODUCTIONS**

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An exciting and potentially profitable research area for a wholesale nursery is the collection, evaluation, production, and release of *new* plant materials. "New" does not necessarily mean unknown but may include any wild or cultivated plant of merit that can be collected and commercialized. Thus, a primary goal of our research program is the introduction of new ornamentals, including native and exotic plants.

## **PROGRAM OBJECTIVES**

Any introduction program should be guided by clear objectives. Innumerable plants can be obtained from wild habitats or through exchange programs; however, resources to evaluate and maintain collections are usually limiting. Programs without clear purposes may end up with random collections of materials that may have little sales potential. While this approach may be acceptable in a botanical garden, it does not work in a profit-motivated commercial nursery. Major program objectives at our nursery include the following:

1. Serve as a center for receiving new materials from U.S. and foreign sources and via our own collecting and breeding programs.
2. Develop a logical propagation and production system so that collections become a source of new materials for our industry, and ultimately the public.
3. Release new ornamentals worthy of trademarks and patents.
4. Produce promotional and production information to growers, customers, sales staff, and the public.
5. Encourage landscape architects, contractors, retailers, governmental agencies, companies, and individuals to utilize new materials.
6. Make the program profitable.

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## COLLECTION POLICIES

The second step in a sound introduction program is the establishment of collection policies. Plant collecting should not be a random process, rather it should be based on strict acquisition criteria. What will be collected and why?

The following questions guide our collecting program:

1. Can the plant be grown successfully at our nursery and is it adapted to our market area, present and future?
2. Is the plant a "new" addition to the trade and/or is it "better" than selections already available?
3. Does the plant have some special ornamental characteristics, landscape uses, or other merits worthy of commercialization?
4. Is the plant of particular interest such as for breeding programs, to complete a collection, for research, or to preserve the genetic pool of a species?
5. Is the plant without objectionable characteristics?
6. Do we have the time, space, and means to evaluate and produce the plant?
7. Does the plant have significant sales potential, and can it be profitably produced?

Before seed, cuttings, or plants are brought into the nursery we try to answer "yes" to most or all of these questions.

## SOURCES OF PLANTS

"New" plants can be obtained from many different sources. All possibilities should be considered but in some priority order which attempts to ensure that what is acquired will thrive at the production site and in a given market area. As long as collection policies are clearly stated and followed, the process should operate effectively.

The following sources of plant materials should be considered:

1. Native habitats in your state and other states with similar climatic and edaphic situations.
2. Arboreta and botanic gardens.
3. Governmental agencies.
4. Commercial companies, such as other nurseries.
5. Individual plant experts, collectors, and private gardens.
6. Internal company collecting from native or cultivated sites.
7. Internal breeding programs and selection from production stock.

## PROPAGATION, PRODUCTION AND EVALUATION OF NEW PLANTS

Following collection or introduction of a plant not previously grown, a series of research steps are followed in propagation and production. It is also desirable to evaluate the plant for adaptability to the market area and to observe landscape performance. These steps may require two to five years before release, or may end more abruptly if we cannot determine an economical method to produce the new plant.

**Propagation.** We generally will try several methods depending on the plant and propagules available. Propagation references are consulted whenever possible to get a lead on ways to propagate a new species. If the plant is unknown in the literature, we basically have to start from scratch. For seed we will try planting fresh seed in various media; cold or warm storage with subsequent seeding at various time intervals; scarification treatments if seed appears hard; and any other technique we can dream up. As you can imagine, this can be a hit-or-miss experience.

Vegetative propagation is even more complicated because of the many variables involved. In addition, it may be difficult to collect cuttings over many months and get the material back to the nursery in good condition. This is especially true if collecting from the wild in remote areas of Texas, other states, or foreign countries. Cuttings are selected, treated with many different rooting compounds, stuck in different media and placed under varying mist regimes. The procedures may be repeated several times a year if material is available.

The propagation scheme can be simply outlined as follows:

1. Seed, cuttings, other methods.
2. Special treatments, including stratification, storage, scarification, and treatment with rooting hormones.
3. Media trials.
4. Misting or watering sequences.
5. Time allotments.
6. Research data on propagation percentage, quality, speed, transplant success, etc
7. Special problems, especially diseases.
8. Economic analysis of propagation techniques required.

**Production.** Once a successful and economical propagation method is determined, the plant moves into simulated full-scale production. This is done in the R&D nursery since the production method is still very much experimental.

The entire production schedule is determined for each plant to be produced in whichever size it is to be marketed. Production data includes these items:

1. Media, fertilization, water requirements, pruning, and other maintenance requirements, especially pest problems.
2. Growth and transplanting schedules.
3. Initial evaluation of plant performance in containers and under production regimes.
4. Any special requirements or problems.
5. Formulation of a crop-production schedule including timing to produce a saleable size plant.
6. Economic evaluation of the entire system.

**Adaptation evaluation.** Evaluation of a new plant in growing conditions of a large marketing area is a difficult problem for a grower. Plants need to be distributed to responsible evaluators who will see that the materials are planted and maintained properly and observed for landscape performance. We try to send new plants to universities, parks departments, and even to customers to have them evaluate the material for adaptability to the varying conditions in our market region. While we can do reasonable evaluations at our nursery, there is no substitute for widespread distribution and performance evaluation by other cooperators in different parts of the state and region.

#### INTERNAL RELEASE FOR COMMERCIAL PRODUCTION

Once a new plant has survived the research program we must convince both our Production Department and Sales Department that we have a "winner" for the company. Either department can stop the release at this point, ask R&D to hold it for further evaluation or future consideration, or agree with our recommendation that we should commercially produce the plant and offer it for sale. This is a tough hurdle that the plant must overcome but is an important part of the process.

Sales must agree that the plant is better than or different from other species already available and that the sales potential is great enough to be profitable. If they buy-in to the release they must then commit people, time, and resources to the promotion and sale of the new plant. Once Sales agrees, they meet with staff in Production to decide numbers, sizes, and product availability. All parties have to agree and work cooperatively to see that the program succeeds from this point onward. This is most important because it links Production and Sales. It is relatively easy to find and grow new plants. Selling them is often more difficult. It's

absolutely essential to have a marketing plan even before the new plant is available. If not, a nursery can end up with hundreds of plants that no one knows and no one buys. This can ruin a small grower and a lot of good plants.

### SUMMARY

In summary, a plant introduction program should start with well-defined objectives and collecting criteria. Research on propagation, production, and regional evaluation, if successful, may result in internal release of a new plant. The Production Department takes the plant and produces the quantities and sizes that are stipulated by the Sales and Marketing Department. Any needed sales and promotional releases, publications, and programs must be prepared before sale of the new product. While R&D can provide the technical information and serve in a consulting capacity, it becomes the responsibility of Sales to really promote and sell any new plant.

The key to the entire program is that it will be well-organized, technically sound, with a cooperative effort among Research, Production, and Sales. Also it must be profitable in the long run or the company will not be able to continue to support the release of new plants.

A successful program ultimately means that landscapers, the industry, and the public have access to new plants to enjoy and to beautify our many landscapes.