

BENEFITS OF GOOD RECORD KEEPING IN PROPAGATION

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There are many factors that go into the making of a good propagator: education, training, personal interest, a keen eye, and the ability to learn from success and failure—to name a few. Another element that can aid the propagator to hone skills and reduce failures is that of good record keeping.

The average propagator is dealing with several hundred plant cultivars. When items such as: propagation medium, hormone concentration, size and maturity of cuttings, flat density, and timing are all considered, this produces thousands of bits of information to remember. As years go by and crops are repeated, it becomes more difficult to remember the details of producing a particular crop.

Personal experience with these problems led me to develop a record keeping system and subsequent forms which can be used by the beginning and experienced propagator alike.

METHODS

Table 1 shows a form which is the initial step in the process. One should start by logging each day's production. Show the quantity produced, name of plant, a description of activity performed, the date and the number of people involved in production for the day. As the log is continued, it produces a chronological listing of propagation by the week and month for the year.

Table 1. (Daily Propagation record sheet)

QUANTITY	CULTIVAR	DESCRIPTION	NO. OF PEOPLE	DATE

Tables 2 and 3 are forms for recording all pertinent information pertaining to the propagation of a particular crop by either seed or cuttings. These cards are designed to fit a standard 8 x 5 in. index file box. The card is filled out and filed alphabetically in the index box. Later as changes occur in the crop the card is retrieved and details added. Finally as the plants are potted and counted the results are noted and the card is moved to a non-active file.

Table 2. (Record card for Cutting Propagation)

CUTTINGS

Botanical Name: _____

Common Name. _____

Date Propagated _____ Rooted _____

Cutting Method _____ Size _____

Medium Mist _____ Bottom _____ Heat _____

Treatment: _____

Hormone. Type _____ Conc _____

No of cuttings per flat: _____

Date potted up _____ No of liners _____

Area to be placed _____ Prop Initials _____

Source of cutting _____

Results % notes _____

The non-active file becomes a collection of all the propagation over a period of several years. Numerous cards may accumulate for one cultivar. At this point a "Master Card" can be developed, gleaning all the details of successes and failures to establish a program for the future production of each particular plant.

Table 3. (Record card for Seed Propagation)

SEED

Botanical Name _____

Common Name _____

Date Propagated _____ Breaking _____

Area to be placed _____ Rooted _____

Medium _____ Top Dress _____ Bottom Heat _____

Treatment _____

No of seed per flat _____

Cleaning Instr _____

Source of seed _____

Results. % notes _____

BENEFITS OF RECORD KEEPING

The benefits of a record keeping system will be immediate as well as long term. Short term it forces the propagator to keep a close watch on the crop for subtle changes such as callusing, rooting, and germination. It is during these inspections that disease and pest problems are discovered and can be dealt with prior to a major disaster. The propagator also learns the type of cuttings that can be produced rapidly and those that are more time consuming. Details about the variation in greenhouse environments and differences in media become apparent and useful. This system also becomes an excellent method to track the progress of small scale experimentation which leads to improved techniques.

Long-term, the possibilities are nearly endless. The details on the record cards become the raw data to develop a wide variety of lists and schedules.

Information gathered on the form in Figure 1 can be utilized to make lists of plants to be propagated each month. It can help with scheduling when greenhouse space is critical. Further use of this form can assist in budgeting and lining up supplies and labor needs. Calculations made using this same data can lead to establishing daily propagation quotas.

The detailed data collected on forms in Tables 2 and 3 can be consolidated to produce lists of very specific information. An example of this: ripening dates for seed collection, seed treatments, reliable seed suppliers, and alphabetical listing of plant cultivars with addresses where seed, cutting, or scionwood can be collected.

CONCLUSIONS

This record keeping system and its results are only as good as the effort put into it.

The propagator must be diligent in making proper and timely entries.

The rewards of a good system can result in substantially improved stands in the cutting flat, seed bed, or grafting tent. Ultimately this results in a more efficient operation and greater profitability.

Many propagators today have access to a computer. This system would easily lend itself to computerization.