

Production and Marketing of Unusual Dwarf Conifers

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INTRODUCTION

The market for dwarf conifers has changed greatly over the past 20 years. What were once considered to be collector items have now found their way into the vast nursery plant market, in large production numbers. We might ask why this has taken place. Basically, this has occurred because of need and not out of collector interest. Our landscapes are changing, and our clients are attempting to satisfy the new generation. Properties are smaller, free time for plant maintenance is less available, and the need for self-contained plantings exists.

PROPAGATION

Our company started out very small with low production numbers of many different cultivars. However, today we have found ourselves selecting certain high-demand cultivars and producing them in greater quantities. To accomplish this, our first step was to set aside an area for stock plants that could be maintained in strong, healthy vigor at all times. It has become evident that we can never have enough stock plants. For example, it may be necessary to take 5000 scions of one cultivar of dwarf blue spruce. To achieve these numbers, it is necessary to have on hand and maintain several stock plants of this cultivar. In addition, in order to maintain a healthy structure, stock plants should be cut every other year.

The second step in this production process is to have adequate propagation facilities. Production of conifers is basically started in the dormant season. We begin the first of December with rooted cuttings and the grafting of *Cedrus*. Throughout the winter, we continue to graft and stick cuttings simultaneously. Although, the optimum time to produce conifers is December through February, evidence has shown that most conifers root during a period starting with the first killing frost and continue until the first of April. Grafting begins with cedars, followed in order by spruces, pines, firs, and hemlocks. The season is concluded with *Chamaecyparis* and *Thuja*.

No specific plant order is followed for rooting cuttings. This is dependent on the season and the market demand. Cuttings, with the exception of those that are to be sold in the fall as heavily rooted cuttings (these are maintained in our production area and bare rooted in the fall for shipping), are potted in March/April. Grafts start to market by May 15, although some cultivars are fit for shipping at an earlier date. Liners are potted in 1-gal containers beginning in June. Depending on available space and market requirements, the potting process continues through August.

GROWING AND MAINTENANCE PROGRAM

Our growing and maintenance program is fairly basic. We begin with a media of pine bark, sand, and peat and add to that fertilizer and lime. As plants are potted, they are checked for proper tagging and then staked if necessary. Staking gives vertical or weeping plants a more uniform appearance, as well as providing the terminal leader with an extra boost. We have discontinued liquid, overhead

fertilization and rely solely on our slow-release program for fertilization. As fall approaches, we begin to prepare for overwintering. By building portable huts, we have reduced the number of plants that have to be laid over. This is done by driving reinforcing rods into the ground at 3-ft intervals, and then placing conduit bent in a hoop form over the reinforcing rod on either side of the plants. These hoops, as well as our other houses, are covered with white poly.

FIELD PRODUCTION

Field production provides us with the ability to plant out many different forms of conifers, and at just about any time. Prior to planting, our liners are prepared by pruning, tagging, and bare rooting. The plants are then packed in box pallets and taken to the field where they are planted mechanically. The tree planter we use has the ability to handle plant material from peat-pot size up to a 7-gal container. All fields are prepared in advance, and all rows are marked and recorded.

A cover crop is worked in after planting, and we complete our herbicide banding at the same time. As most nurseries have found, the weather is a major influence on herbicide use. We start out with pre-emergence and follow up with post-emergence herbicides. Follow up staking and additional maintenance is done soon thereafter. Most dwarf conifers are grown in our fields for at least 6 to 7 years before they are harvested. Because of the variables in growth rates and market stability, we usually will start replanting a field when it is 60% to 70% harvested.

Digging is usually done mechanically, but often we do hand dig. We prefer to place all field-dug plants in wire baskets, as this gives the entire plant stability. Rotation of plant material varies from year to year because we believe it is advantageous to present new material to our clients. However, we do attempt to rotate the same cultivars at least every 3 years.

MARKETING

Marketing these plants is in itself the true test of worth. When presenting an 18- to 24-inch dwarf plant that is 8 years old at an \$85.00 wholesale price, justification of its value and quality of investment to the buyer is essential. This means that a thorough knowledge of these plants is vital. Growing dwarf conifers requires patience, financial investment, and marketing ability. If you are growing a true dwarf form in the conifer family, you must be prepared to not only invest time but also acreage. Production from a propagule to a market specimen requires commitment of your growing area and finances for a minimum of 4 to 10 years. Dwarf conifer production varies from nursery to nursery. Some nurseries can produce the plants more quickly, and some may take longer. The end result is the same. The need is there and we must fill it. Know what you grow, and teach what you sell.

The mid morning session on Wednesday was moderated by David Sanford.