

NURSERY PRACTICES IN SWEDEN

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This paper presents containerized forest nursery practices in Sweden. Containerized stock was introduced some 30 years ago in Swedish forestry. Since then, the use of this stock has been successively increased at the expense of bare-root stock. Last year, approximately 400 million containerized and 30 million bare-root seedlings were produced in Sweden.

In the paper, the development of container design and the most common containerized systems used today will be presented. Container design has been focused on different principles for directing root growth during the production phase. The first systems introduced in the early 1970s implied stability problems for pine seedlings when planted in cold and dense soils. Since then a new generation of container systems have been developed with a design that prevents root deformations.

The paper will present common practices regarding growing densities, watering, fertilization and duration of growth, both in the greenhouse and the outdoor area. Also systems for blackout treatment for initiation of bud set in special outdoor areas and practices for cold storage during winter will be presented.

The presentation will also include information of some tests for operational seedling quality assessment done in Swedish nurseries today. These comprise a system to determine when to begin lifting in the autumn based on dry weight fraction of the shoot and detection of root damages or root vitality by measuring the root growth potential for a certain planting stock.

Finally, practices for seedling distribution to the planting area and the strategic distribution of plant boxes over the specific site are presented together with techniques for manual and mechanized planting.