

Besides the established programs for cherries and grapes, and those which are underway for other stone fruits, a program for the maintenance and distribution of registered garlic is in the initial phase at Davis. At present such a program is maintained by industry in the northern part of the state. A small planting of garlic was made on Foundation Plant Materials Service premises this year. Another year's testing will be needed to determine if registered garlic can be grown here. The garlic program is one that certifies to the freedom from the stem and bulb nematode, Ditylenchus dipsaci. Virus diseases are not involved.

Information concerning the strawberry, citrus, and avocado certification programs may be obtained from the Bureau of Nursery Service, California Department of Agriculture, 1220 N Street, Sacramento 14, California.

MODERATOR SPRING: Thank you, Dr. Alley. Along with Dr. Alley's field, we have this morning to speak to us Mr. Walter Krause on the progress of production and distribution of certified nursery stock. Walter has been active in his field for over 20 years. He is a sales and field representative for Stribling's Nursery for the five southern counties of the San Joaquin Valley of California. His duties, in addition to this, are as Director of the research program for Stribling Nursery, which carries on research in plant breeding, variety selections, "bud-line" selections, indexing and virus control and also work in specialized propagation methods for the production of fruit trees and grape vines. I would like to call now on Walter Krause to cover his section.

The Commercial Nurserymen's View of Certification

Walter D. Kraus

Stribling's Nurseries, Inc.

Merced, California

It has been our privilege and opportunity to work very closely with Dr. Curtis Alley and his associates and the State Bureau of Plant Pathology in the establishment of Certified Increase Blocks of cherry varieties, grape varieties and rootstocks. We were inexperienced in how to convert and apply these new phases of science to a commercial and practical enterprise, integrating them into our production of nursery stock. The University of California, and the Bureau of Plant Pathology, and the Nursery Service, California State Department of Agriculture, have given their undivided support and assistance, for which we are very grateful.

Dr. Alley has informed us of the development and importance of registration and certification of plant material, and I would like to review with you what we are doing with this material, how we maintain such plants, and the inspection of these Increase Blocks and last of all, the very important point, the acceptance of such nursery stock by the commercial grower.

Registered plant material purchased from the Foundation is planted on our property, isolated from related plants by a given distance ranging from one hundred yards to one-half mile, depending upon the variety. The soil history also must comply with the requirement of a defined number of years during which time related plants have not infested the soil. The Increase and Mother Blocks are under our supervision, directed by the Foundation. Budwood or cutting stock is removed from this propagation area only under the direction of the Foundation. Repeated inspection of each plant to determine continued cleanliness and variety identity is carried on by the Foundation. Every effort is exploited to maintain these Increase Blocks in perfect condition to ascertain maximum production of budwood and cutting stock.

This year we are growing for the commercial trade, three grape varieties, three grape rootstock varieties, and three cherry varieties. These are all grown under the Certification Program.

Production of nursery stock under these conditions, complying with regulations and procedures not common to nursery production have at times proved a burden and we have at times reviewed the possibilities and the advantages of this program. We are, however, delighted with the progress and advances and are anticipating an active participation in the Certification of stone fruits. We are hoping for this to become active and a reality very soon. In the meantime we have designed and built our own chamber for heat treatment of stone fruit varieties, having completed the indexing of all varieties we are growing and having initiated periodical re-indexing of all varieties. We have already "tasted" of the advantages of growing clean nursery stock. Indexed bud-lines on seedlings from indexed trees have resulted in twenty per cent increases in bud stand, plus additional caliper sizes and tree uniformity. At this time we are participating in several test plots to determine the effects of viruses on fruit quality and production.

We are interested in the advancement of superior nursery stock to supply a better informed, better equipped and qualified commercial grower than we have known in the past decades. Thus we are continuing with enthusiasm to co-operate with the Registration and Certification of nursery stock.

My personal experience in the cherry producing area is very limited, therefore it is difficult for me to enlarge on the Certification of cherries and their rootstocks. However, the Certification of grape varieties and their rootstocks in the southern half of the state has been very enlightening and rewarding. Growers in the table grape and valley wine producing areas are reporting yield increases of twenty and twenty-five per cent, better plant uniformity, and increased vigor, resulting in vineyards which withstand the attacks of insects and diseases. But the most gratifying and encouraging are the reports of superior quality of their product.

In our agricultural production of surpluses the "quality factor" becomes of ultimate importance. Increased production alone only leads

to more controls and government controlled marketing orders. These I presume, are necessary, but often prove to be necessary evils.

The all-important question, and with this I conclude, what can the commercial grower expect from his certified nursery stock? What does he say about certification and what is his attitude toward premium prices for certified nursery stock? Commercial growers planting certified nursery stock in their orchards and vineyards at present are growers that look ahead and very carefully plan and evaluate every phase of the future. These people recognize the value of superior merchandise; they not only expect increases in production, but much more than this they expect to deliver a product to their market and their consumer that is of superior quality - superior in appearance, uniformity, flavor and - in grape production - higher sugar content. These "extras" are the factors that will make Certified Nursery Stock the best buy in spite of established increased prices for such stock. The production of superior merchandise leads to greater and proper utilization of our product. The results are satisfaction, pride with accomplishment, and desire to build an industry with which to be affiliated.

These are points of interest to us, and with this scope and anticipation we feel the Certification of grapes, citrus, fruit and nut trees and other nursery stock will induce similar rewards of accomplishment, satisfaction and monetary gain for those who look ahead.

MODERATOR SPRING: Thank you, Walter. The importance of selected plant materials is more and more evident every day as we look around our industry, whether it be for the production of fruit, as we have discussed this morning, or in my field - ornamental horticulture. We are very grateful to you gentlemen for your discussion on the certification of nursery stock and how it is maintained.

I rather doubt that our next speaker needs to be introduced to most of you. Mr. Wray Hildabrand has given many years to agriculture in California, having served some 15 years as the Chief of the Bureau of Nursery Services, California State Department of Agriculture. Since 1961 he has been assigned additional duties - as often happens in these Divisions - and also received a new title, Assistant to the Chief, Division of Plant Industry. This morning I'd like to call on Wray to discuss with you the progress in bringing the nomenclature of western ornamentals into conformity with the International Code of Nomenclature for Cultivated Plants. Wray --