AGRICULTURAL EXPERIMENT STATION Oregon State College Tm. A. Schoenfeld, Director Corvallis

Station Circular of Information No. 335

March 1944

A PLAN FOR IMPROVING OREGON-GROWN FRUIT NURSERY STOCK 1

Virus infections of stone fruits have become a matter of serious concern to nurserymen everywhere. The seriousness of this trouble has been highlighted by surveys made by various state and federal agencies brought about by conditions appearing in home and commercial orchards. Much has yet to be learned about these diseases as to vectors, symptoms, seriousness of damage on different varieties, masked carriers, etc. Research work on these problems being conducted by the Oregon Experiment Station is supplemented by such work by other state experiment stations and the U.S.D.A.

Every nurseryman is directly and vitally concerned with the problem of securing healthy propagating material, so that he may furnish clean stock to his customers that will reflect credit to him rather than stock which is apparently clean at time of sale, but which may carry hidden or latent disease which will result in a profitless planting, a further source of infection and a disgusted and dissatisfied customer.

The shipment of diseased stock may also lead to quarantine action by other states, and will certainly result in bad publicity and disastrous sales resistance in the trade.

To meet this situation there is presented here a program which will make available an adequate supply of propagating material which is apparently free from virus diseases, at least to the extent that present knowledge of them makes this possible.

Since viruses are more prevalent in cherries than in any other fruit-tree stocks in Oregon our chief immediate emphasis should be placed on the registration of clean cherry stock. Registration of other types of fruit trees, however, will be included as time permits.

This registration plan involves the marking and issuing of registration certificates for trees which are apparently free of virus as sources of propagation wood for nurserymen and orchardists. Any nurseryman following this plan will receive special stickers from the State Department of Agriculture indicating meritorious quality for marking the stock. In order that the 1945 stock may be eligible for such recognition the bud wood used in 1944 <u>must</u> be selected under this plan.

The plan presented in this circular of information has been prepared and approved by representatives of the Oregon Agricultural Experiment Station, Oregon State Department of Agriculture, and Oregon Association of Murserymen, and constitutes a cooperative project between these agencies.

The duties of the three cooperative agencies are as follows:

A. Murseryman

- 1. Fill out the attached blank and send to Department of Plant Pathology, Oregon Agricultural Experiment Station, Corvallis, Oregon, by April 1.
- 2. Locate a source of bud wood for each variety of stock to be registered, in order that it may be ready for first inspection by May 1. The selected trees should be true to variety, apparently free from disease, old enough to bear fruit, and a reasonable distance from other infected trees. They may be located in mother blocks at the nursery, in commercial orchards, or in home gardens.
- 3. Take all propagation wood for these varieties from these registered trees.

B. State Department of Agriculture

- 1. Help nurserymen to locate trees to be registered and assist in the examination and selection of trees for registration.
- 2. Inspect nurseries early in spring and again in mid-summer for apparent virus trees.
- 3. Require field roguing of all diseased trees within two weeks after either inspection.
- 4. Issue a special sticker for trees originating from registered bud wood, stating that such trees are apparently free from viruses.

If at any time virus infection is found in a nursery block that cannot be traced back to the registered tree from which the bud wood supposedly originated, or if there appear any other irregularities to indicate dishonesty, the right to use the above-mentioned stickers may be cancelled.

C. Oregon Agricultural Experiment Station

- 1. Examine trees that have been selected for bud wood and determine whether they are apparently free from virus.
- 2. Test any doubtful trees by the bud transmission method.
- 3. Examine all selected trees at fruiting time (Hort. Dept.) for trueness to variety.
- 4. Mark tree in conspicuous manner so that its history can be easily checked and recorded. Issue registration certificates for each tree meeting requirements. Registration may be cancelled at any time a tree is found to be diseased.

The Official Register for trees may be consulted at the Department of Plant Pathology, Oregon State Gollege, Corvallis, or at State Department of Agriculture offices in Salem or Portland.

5. Assist state department personnel in virus recognition.

APPLICATION FOR FRUIT TREE REGISTRATION

Nurserymen or orchardists desiring to register fruit trees as desirable sources of propagation wood must fill out this application blank and send to Department of Plant Pathology, Oregon State College, Corvallis, Oregon, before April 1 of the year the trees are to be registered.

Applicant's nameAddress			
Mo. of	Trees	Variety	Location
···			
			
·			
	-		
		^	· · · · · · · · · · · · · · · · · · ·
	•		

If more space is needed use reverse side of this sheet.