

REPORT OF SUB-COMMITTEE ON ROOT STOCKS

The main study and objective of this Committee consists of an endeavor to ascertain whether it is possible to establish virus free sources of seed for the avocado industry. For the practical grower and nurseryman, it has been reasonably established that the virus disease known as Sunblotch is transmitted through the seeds as well as through material used in vegetative propagation. It has also been established apparently that this transmission may be in high ratio to the total number of seeds used.

Because of the failure, as yet, of nurserymen to properly segregate the seed from individual trees and to keep records on them, with few exceptions, the accumulation of facts is very slow. For this reason, it was not thought that there was sufficient material available last year to warrant the submission of a report.

Other phases of the study of the complicated problems involved in avocado root stocks are being left to the University and other institutions with laboratory equipment and the personnel necessary for detailed studies. The Committee transmits such information and leads along these lines as may come to its attention to the proper persons.

The Committee has established a number of test plots in the various growing areas during the past season and they are under close supervision. It will be a matter of several years before definite results may be expected from these plots.

Concretely, the Committee can point out two positive results and several negative ones, which will still require further investigation. In the light of what we know at present, none of these statements are to be taken as final.

Seedlings from a Ganter tree, grown by Milo Hunt of Whittier, have been raised for ten to twelve years under carefully segregated and observed conditions and though budded with a wide range of Fuerte and other bud sources from clean trees, have never shown any signs of the virus. Seeds from a Ganter tree across the street from the Hunt tree have been used four years under controlled conditions and have shown no symptoms. They have both provided exceptionally vigorous and fine seedlings, but like most Ganter trees the crop has been on the small and inconsistent side.

Seedlings of the following trees have shown high ratios of diseased seedlings and should definitely be considered dangerous to the industry: The Wood-worth Black Seedling at Whittier, the very large tree growing on the A. J. McFadden property at Irvine, and a tree belonging to L. A. West of Santa Ana. Details will be furnished on application.

Two ten acre plots side by side at Santa Ana, belonging to Wesley Marquart and Mrs. Herbert W. Walker, should provide much valuable information in future years as they both have exact parentage root and top of each tree. Establishment of new orchards on such a basis and the cooperation of all nurserymen will do much to advance a solution of this problem.