

Questions and Answers

Avocado Institute, October 29, 1937

Q. Will Professor Hodgson give the names of the four or five relatives of the avocado being used as root-stock?

A. (Prof. Hodgson) I am not sure I can give you the names of all of them. California Laurel is a relative of the avocado. European Laurel. Then the two nearest relatives—Persea Indiga, Persea Linguan—which have no common names. Those are the four or five we have at the present time, but there are some others.

Q. Are cover-crops being used in avocado groves; if so, with what results?

A. (Rounds) Yes, they are used. I don't think we have specific information but I think it is just one good way of adding organic matter to the soil, if cover-crops are grown at a time that they will not compete with the trees. Avocado trees are shallow rooted and that makes it very easy for cover crops planted to compete for moisture and fertilizer elements needed by the tree. Therefore that would have to be taken into consideration. If you can grow cover crops under your conditions at the time of year so it will not compete with the tree it would be a very good way to add organic matter to the soil.

Guy Steele: Also, in case of soil erosion, cover crops help to a great extent—a very fine thing to grow and I believe you get good results. I don't think you have robbed your soil too much. You have done more good than harm.

Q. On shoots from the roots of young trees that have been frozen beyond the bud union, would it be advisable to bud now, or wait until next spring?

TIME FOR BUDDING, GRAFTING

A. (Carter Barrett) It is getting pretty late to do much budding, but I believe in most cases it would be wiser to wait until spring if it has gone this far. This much may be said, however; if you put them in now and they stick, you will be ahead. If they don't stick, and you don't allow the roots to restrict the shoots too much, you have only lost your time and your buds.

Q. Ray Marsh, what do you say about that?

A. (Ray Marsh) I have had very poor success with my grafts this year. I think only about 15 or 20% were good, so I decided to put some buds in this fall. The first time I have ever tried fall budding but our bark still slips in a good warm location where it didn't freeze at all last winter. H. E. Marsh does a lot of fall budding in his nursery. As Carter Barrett says, it is more or less a gamble at this time of year. If seedling shoots are in good shape and you can get hold of good buds why it is easy to do it right now and we

have three weeks of temperate weather from now on, the chances are pretty good, but if we get a cold snap and the bark tightens up and the sap doesn't flow, you may have your work for nothing.

Q. Winter is here again. We know what happened last winter and the care during the following months but what if we have another freeze like last winter; what shall we do?

A. Who will volunteer on that?

A. (Rounds) Whether we heat or not is a matter of costs taken over an average of years. Will you save enough crops and trees? It depends on your location. It is certain that putting in pots would be good insurance. If damage is only once in ten years I don't believe it would be worth the cost, but that is only my opinion.

FRUITING AND WIND PROTECTION

Q. About three-fourths of the fruit set on my Fuertes is found on the northeast side of the trees. That is on the side away from the prevailing wind. Does that indicate that they would set better all over the trees if protected from the wind?

A. (Wahlberg) We feel that where a condition of that kind is an annual experience, there must be some direct effect between the trade-winds and the yield of fruit. If the grove is in the coast district, the northeast side of the tree would be the protected side, so you would have the southwest side subject to the coastal winds. We have found both with citrus and avocados exposed to steady cooling breezes every afternoon, that it is an advantage to provide windbreaks and raise the heat units in those orchards.

Carter Barrett: I could cite one or two cases of the effect of what windbreaks do down close to the coast. A certain Fuerte tree I have in mind in Santa Monica bore no fruit for two or three years, on account of the wind three blocks from the ocean front in Santa Monica. The owner put up a lath windbreak and all of the tree below that windbreak had perfectly normal foliage and quite a lot of fruit set, while the upper part had the same peculiar appearance as before and no fruit whatsoever. I saw the same condition down near Carlsbad. The tree was on the ocean front, where they get more wind than at Santa Monica. That tree was perfectly normal and bearing but that part above the top of the garage, exposed to the wind, was not bearing nor normal in appearance. Under such conditions, wind protection is advantageous.

DEVELOPMENT OF FUERTE STRAINS

Q. Regarding this matter of heavier bearing strains of Fuerte avocados. I gather that you don't hold out much hope for that?

A. (Prof. Hodgson) The question had to do with the possibility that there are so-called "strains of the Fuerte" that may have inherently different bearing behavior. It is a very attractive idea and I hope we will find such strains. The thing that discourages me the most about it is that in the collection that I referred to, where we had the first crop this year, the strain that we had banked on the heaviest is a complete blank at this season. If it has what everybody says it has, it should be the best of the lot. And one of the

strains that I didn't have any belief in at all (I put it in against my judgment—for diplomatic reasons) to my astonishment it has done the best. I don't believe the two strains are significant. We won't know for a number of years. I am not optimistic. If we compare the situation that exists in other fruits, we haven't much to encourage us. I think what we are going to have to do is to create some new varieties.

Q. What is your opinion in regard to this question of drying out trees at certain times of year—in the fall—there are quite a number of growers, who pursue that practice and have at one time or another produced good results.

A. (Jean Miller) It has generally been our policy to recommend good care straight through the season—good care is a reasonable supply of water and also meeting the other needs of the tree. It has been tried here with lemons and found to weaken the trees.

End of afternoon session Eighth Annual Avocado Institute.