

Is Alternate Bearing of Avocados Transmitted by the Root-Stock?

R. W. HODGSON

*Los Angeles, Calif., March 11, 1946.
Mr. B. M. McDonald, Fallbrook, California.*

Dear Mr. McDonald:

I am in receipt of a letter from Dr. J. Eliot Coit, in which he advises that you have raised the question as to whether there is any likelihood, when used as a rootstock for Fuerte, of the transmission from the rootstock to the scion of the alternate bearing tendency which characterizes one of your rootstock varieties. From Dr. Coit's remarks, I am led to conclude that the rootstock variety in question may be your Gherkin. I remember your telling me about this rootstock variety several years ago; indeed you let us have some scion-wood of it and we now have a nice young tree of it in our variety collection.

The answer I would give to this question is that the alternate bearing tendency appears to be purely a characteristic of the scion variety and concerned solely with the top of the tree and not with the root system. There is, I think, not the slightest evidence that rootstocks of themselves influence the bearing behavior of fruit trees with particular reference to the alternate bearing tendency. On the other hand, I think there is some evidence that double working which provides an intermediate trunk section or "sandwich" may affect the alternate bearing tendency somewhat. Some years ago we established a small experiment on this point and the trees are just now coming into good bearing. We expect to start keeping individual tree yield records with the crop of the current season.

Referring again to the question you have raised, we do not have any data which would help us to answer that question, nor do I know of any experimental work on it with other fruits. Nevertheless, we consider it extremely doubtful that a rootstock characterized by the alternate bearing tendency would either establish or accentuate that tendency in scion varieties worked upon it.

With kind personal regards and best wishes, I remain

Sincerely yours,

R. W. Hodgson,

Professor of Subtropical Horticulture, University of California.