

In this case each tree has immediately surrounding it in the four nearest distances two trees of one reciprocating variety and two trees of another reciprocating variety. Thus there are for each tree chances for two different reciprocating cross-pollinations and each operates from two trees. There is the chance that one of the two cross-relations may be more effective than the other, and hence the interplanting of four varieties is in general more likely to give fruit than an interplanting of only two varieties. If, however, cross-pollinations are not effective between any two, as let us say A1 and B1, then the A1 and the B2 and the B1 and the A2 should reciprocate. If it is determined that they do this perfectly the two pairs may be planted to greater advantage in a two-variety interplanting.

When three A varieties and three B varieties are interplanted the maximum opportunities for cross-pollinations are obtained when the varieties of each group are arranged in repeating sequence in diagonal rows which alternate as shown in the following diagram:

A1	B2	A3	B1	A2	B3
B1	A2	B3	A1	B2	A3
A1	B2	A3	B1	A2	B3
B1	A2	B3	A1	B2	A3
A1	B2	A3	B1	A2	B3
B1	A2	B3	A1	B2	A3

In this arrangement any tree has as a female the chances for three different inter-varietal reciprocations in pollination from the four nearest trees and one of these is duplicated in the two trees adjacent in the same vertical row. The A and the B varieties are arranged in pairs which alternate in the same vertical row and hence these two should be most fully reciprocating and also most fully similar in season of bloom, habits of growth, and cultural requirements. This arrangement would also promote cross-pollination of any one short-cycle B variety during the second period of opening with pollen of two other B varieties standing next in the diagonal rows.

Special means of promoting cross-pollinations in avocados have been suggested and to some extent employed. Trees of two or more varieties may be planted close together so that their branches somewhat interlock and combine to make one compact group. Another method is to so graft that the branches of two or more varieties are grown on the same trunk and root system to form one tree. This has been done to some extent both in California and in Florida but the results have not been satisfactory. In re-