

ABSTRACT

In studies conducted on avocado at the Field Station of the University of the West Indies pollination was found to be essential for crop production. Insects were necessary for pollination and the common "wasp" appeared to be the most important pollinating agent. Exclusion of insects almost entirely prevented fruit set. In order to increase the probability of pollination the desirability of mixing A-type and B-type cultivars in an orchard was recognised.

The two periods of flower opening, the protogynous dichogamy and the classification of cultivars into two types (A and B) were confirmed. In the A-type cultivars overlapping of the two sets of flowers occurred. Most of the flowers of the cultivar 'Fujikawa' shed pollen during the end of their first period of opening.

Pollen tubes penetrated into the ovary within 1 hour after pollination. Great variations in the rate of growth of individual pollen tubes occurred. Under natural conditions avocado pollen remained viable for at least 151 hours after the dehiscence of the anthers.

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