

The Avocado Inflorescence

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The flowering shoot of the avocado is usually described as indeterminate, which implies that the lateral floral branches are superseded by a vegetative bud at the shoot axis tip (Fig. 1-A). The growth of the terminal vegetative bud causes the lateral floral branches eventually to subtend the new vegetative growth so that the fruit is found somewhat inside the peripheral foliage of the tree. Eventually inflorescence buds develop again at the shoot tip the following year and by extension of the vegetative bud in the center they again assume a sublateral position.

Another type of flowering shoot in the avocado has been observed (Fig. 1-B) in which the inflorescence is determinate and new length growth occurs only by the development of a subtending lateral bud. The determinate inflorescence is similar to the more usual form in that it is composed of a central axis bearing lateral floral shoots. It also arises in the axil of a leaf along the main stem or may terminate the stem. It ends, however, in a simple flower bud.

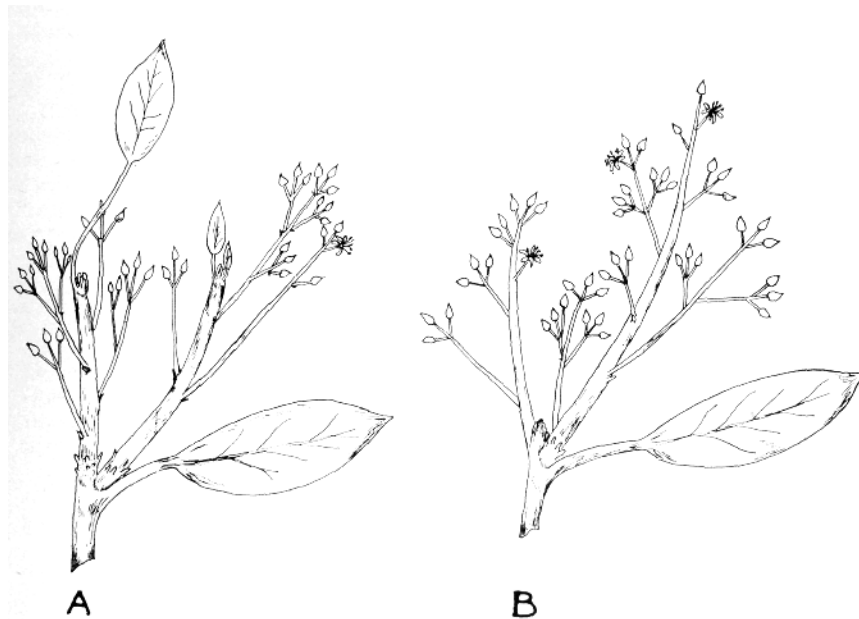


Fig. 1. A. Usual indeterminate flowering shoots on avocado which end in vegetative buds from which length growth occurs. B. Determinate flowering shoots which end in flower buds.

Determinate flowering shoots are found in most varieties of avocado commonly observed. They usually comprise about 5 to 20 per cent of the total ' flowering shoots,

although sometimes none of this type are found on a given tree. This inflorescence type may be associated with the physiological condition in some trees. Thus in some Fuerte trees it has been observed that at time of very heavy bloom a greater percentage of determinate flowering shoots is found.

At least one variety, Topa Topa, has been noted which differs from the others and has about 90 per cent of the flowering shoots of the determinate type and about 10 per cent indeterminate, a most striking situation.

These rather unusual determinate flowering shoots function normally in that they set fruit.