

## **Sunblotch in Avocado Introductions from Texas**

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Suspected sunblotch infection of several avocado clones introduced into Texas from Mexico several years ago has provoked an examination of progeny from these clones now growing in California.

Along the south fence of the Los Angeles campus orchard is a row of fifty Mexican seedlings from a single tree source planted about 1935. These trees have been used as rootstocks for testing and observing clones from various sources. None of these seedling rootstocks showed any evidence of sunblotch prior to topworking, but after grafting six trees have developed symptoms during the past seven years. Four of these six, adjacent to each other, were topworked in November, 1950, to scions of Graham-Arsola selections (1-2W; 15-8), Santa Engracia and Castro 6A, respectively, all of which were received as bud sticks taken from trees of these varieties grafted onto West Indian rootstock and grown at Harlingen, Texas. These four trees show sunblotch symptoms in the sucker limbs which have been allowed to develop below or adjacent to the scions. The scions in each case do not show symptoms of sunblotch.

The remaining two trees which show symptoms of sunblotch each has grafted on it a rather unusual variegated sport of local origin, which was noted about six or seven years ago and thought to be a mutant of interest to students in horticulture. Apparently this variegant is a possible carrier of the sunblotch virus, though leaf distortion and twig symptoms sometimes associated with sunblotch are not well defined or are lacking. Growth on the scions during the past few years has been practically normal and most of the variegation has disappeared, but clearly marked symptoms of sunblotch have developed on the suckers from the rootstock.

Another scion from Texas in the same row of seedlings does not show sunblotch, nor do other limbs on the mother tree. This scion, of the variety Prior from Uvalde, may have come directly from Uvalde, Texas, or from a tree growing elsewhere in California.

These observations suggest the possibility that the four scion varieties from Harlingen, Texas, are symptomless carriers of sunblotch virus. The Texas-grown areas are budded progeny from seedling trees in northern Mexico. These observations, while limited, have stimulated interest in sunblotch studies in Texas and have provided a clue to the possible cause of a rootstock disorder occurring when some varieties of Mexican origin are grown on West Indian rootstock.