

Avocado Fruit Abnormalities

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While the avocado industry is still young it is already evident that the fruit exhibits the usual abnormalities in development found in other fruits and perhaps one or two additional. Among the most common, and as yet unexplainable, of these manifestations is the tendency toward doubling and twinning, various stages of which are shown in A, B, and C. The true double fruit, shown in C, appears to be very rare. Striping of the type shown in D and E comprises one of the most striking and interesting of these abnormalities and is comparatively common. In this case it is clear that a permanent change occurs at one or more points in the base of the ovary wall very early in the life of the young fruit, in all probability while still in the flower stage, which results in the development of a rind or skin composed of sectors of different structure and characteristics. Such changes are known technically as "somatic mutations" and the fruits affected are called "spontaneous chimeras."

Still another abnormality occasionally found consists of a brownish-colored, irregular-shaped monstrosity of woody texture (F) which in no way resembles the avocado fruit, yet is developed from the flower. Its nature and cause are as yet unknown. Fortunately none of the abnormalities described thus far are of particular importance nor are they propagable.

Several cases have been found, however, of trees which bear striped, ridged or corrugated, and hence worthless, fruit where there is abundant evidence that the mixture of tissues involves a considerable part or all of the tree, including of course, the buds. In one of these cases part of the foliage is variegated. Such trees are known as "hyperchimeras" and should be carefully avoided when bud-wood or scionwood is collected, for this condition is propagable and the resulting trees will be largely or entirely worthless. The Division of Sub-tropical Horticulture, University of California, Los Angeles, will appreciate having its attention called to such trees.

