

Accumulations of Salts in the Tips of Avocado Leaves in Relation to Tip-Burn

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If we consider the veins in an avocado leaf as the channels in which the water and salts absorbed by the roots are carried, we note that the veins all eventually terminate near the tip of the leaf. The leaf tissue absorbs water and salts from the solution that passes through these veins. Whatever water is not incorporated into living tissue is lost by evaporation from the leaf but the excess salts move on until they accumulate near the leaf tips where the veins end. When the salts that pile up in this location become excessive and are unfavorable for utilization by the tissue, then tip-burn results.

It may be of interest to note in the following table the per cent of dry matter (which includes salts) in the fresh tissue of the tip and stem halves of healthy avocado leaves from which the midrib was removed.

Variety	No of healthy leaves	Per cent of dry matter in fresh weight	
		Tip halves	Stem halves
Benik	189	33.72	32.42
Blake	180	37.19	35.35
Fuerte	194	38.94	37.89
Puebla	194	35.48	34.38

The table makes it clear that even in healthy leaves, the dry matter which includes salts normally accumulates more rapidly in the tip than in the stem half. When a considerable part of the dry matter consists of chlorine, the leaf is first "burned" near the tip and progressively toward the stem end.