Avocado Fruit Troubles

High temperature, wind and causes of unknown origin occasionally create troubles in avocado fruit. While not usually common or widespread, they can be of concern to a grower, particularly if the cause is not readily apparent. Several of these troubles which have been observed in the field are illustrated and discussed here.

	**Crick-side** - First described by Dr. J. Eliot Coit as kink-neck and later by Horne (1931) as kink-side. Finally the name crick-side (Horne, 1934) was adopted. It is characterized by a definite depression on one side between the stem end and the larger portion of the fruit causing a distortion. In some cases the area of depression turns black and the fruit drops. In other cases, the fruit grows and matures but the distortion remains. Crick-side is usually found on trees carrying a heavy load of fruit. It has been suggested that high temperatures or temporary water-stress may be connected with the occurrence of crick-side, but no definite determination as to its cause has been made.
	**Carapace Spot** - First described by Horne (1929), the name carapace-spot was chosen because of the resemblance to a turtles' back. This external blemish is corky and usually cracked into somewhat regular, angular divisions. The flesh under the carapace spot is undamaged, but exterior appearance is such that the fruit is reduced in grade. Slight rubbing or brushing of tender young fruit on leaves or stems appears to cause this corky growth to start. Fruit on trees exposed to strong winds are more apt to develop the trouble. Windbreaks should reduce injury in windy areas.
	**Sunburn** - Fruit exposed to full sun may be injured by sunburn. This occurs when trees defoliate, or partially defoliate, from any of several causes, leaving the fruit exposed. It is normally most severe on fruit on the south and southwest portion of the tree. Sunburn shows as a pale yellowish area on the exposed side of the fruit. Often the center of this area turns brown to black and may wither.
	**Ring Neck** - This trouble has been observed occasionally, particularly with Hass. The cause is unknown but is believed to be related to soil-plant water deficiency at a critical time. A ring of tissue on the pedicel just above the attachment to the fruit dies, turns black and peels off. If only superficial, the fruit remains on the tree. Growth may be retarded because the restriction impedes movement of nutrients and water outward to the fruit. Most severe in humid coastal areas.
	**Split Fruit** - Splits are relatively common in citrus fruit but seldom seen in avocados. Occasionally splits will develop laterally or longitudinally, particularly on thin-skinned varieties such as Bacon and Zutano. The cause is unknown. If over-mature, both varieties will split laterally around the blossom end.
	Heat-Damage - This trouble has been observed on the "Susan" variety in San Joaquin Valley. It is apparently caused by sudden

	high temperatures, and perhaps water deficit, while the fruit is small. Some fruit drop following injury but those not so severely affected continue to develop and mature normally in all but an area surrounding the stem. The sunken area adjacent to the stem does not soften properly.
	**Warty-Fruit** - Occasionally, very young fruit with a few to numerous small wart-like protuberances become less conspicuous and at maturity are normally no longer evident. The exact cause has not been determined. A possible cause is insect or mite injury.
	**Embossment** - Occasionally, and particularly on Fuertes, a section of the surface will be raised slightly or be a darker color. This is referred to as a sectional chimera or genetic mutation.
	**Woody Avocados** - For some unknown reason, avocado fruit will form into a grotesque woody structure hardly resembling an avocado. The cause is genetic and non-transmissible.

Source: R.G. Platt - California Avocado Society Yearbook 1972-93