

THE ISRAELI AVOCADO INDUSTRY

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The area of avocado plantations in Israel is about 6700 ha but still slightly decreasing during the recent years. Total production in 1997/8 is estimated to be 55000 t. as compared to 78800 t. last season. This decrease results mostly from the severe frost in spring 1997. The general objective in Israel is to reach an average yield of 20 t/ha though the whole country average yield is only slightly above 10 t/ha. It is quite clear that plantations of low productivity will not be able to survive in the present economic situation.

In 1996/7 only 54% of the fruit was exported while in 1997/8 it reached 62%. This low rate is partly explained by the weather conditions but mostly because of low prices in France and Germany, the two major markets for Israeli avocados. Hence, increased quantities of fruits are being sold in the local market. The FOB income in 1997/8 is about 930 \$/t as compared to 870 \$/t last season.

"Hass" continues to be the most important cultivar with 29% of the total area (slightly decreasing during the recent years). Not far behind is "Ettinger" with 28% (slightly increasing). "Fuerte" area is decreasing significantly because of low yields despite the use of growth retardants. This reduction is replaced by "Reed", "Pinkerton", "Ardith" and several new introductions as "Fino" and "Iriet".

The Israeli breeding project have recently released a new cultivar "Galil" which is grown for the local market only. It is a green long-neck Mexican type which matures very early in the season (end of August). At that time the local market is totally empty.

The major objective in research is still productivity with all its aspects as growth retardants, pruning, mineral nutrition and mainly water supply. Most of the growers have increased their water allocation as well as shortened irrigation intervals. This

practice is justified by the effect of water on fruit growth. Small "Hass" fruit (150 g) is being paid only 50% as compared to 270 g fruit. However, there is no experimental proof regarding the interaction between growth retardants water amount and fruit growth. This subject is still under investigation.

Another subject of extreme importance is the use of recycled water for avocado irrigation. It is almost sure that all the good quality water in Israel will be used for drinking and the recycled water will therefore be the only water available for irrigation. Since avocado is the most sensitive fruit tree for salinity, it is subjected to intensive research both in the Coastal Plain and the Western Galilee. It is assumed that sooner or later this problem will reach also the California avocado growers, hence joint research projects are highly recommended.

Other subjects in research priority are:

- Fruit quality and storage: all the procedures are reinvestigated by a team of researchers, growers and representatives of the packing houses managers.
- Plant protection: in addition to the common problems, we are faced with a new serious pest during the recent years, the orchid thrips *Chaetanaphothrips orchidii*. It is spreading quite quickly in the Israeli avocado plantations attacking all cultivars. A special budget was allocated in order to control this pest so that the Israeli avocado plantations will continue to be almost totally clean of fungicides and pesticides.