

The Avocado in Israel

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As far as is known, the first avocado trees were brought to Israel in 1908 to the French Monastery in Latrun, near Jerusalem; the first grafted trees, in 1924. One of those trees bore its first fruits in 1927. None of these trees exists today.

From that time until the early fifties, quite a number of people planted avocado trees in their home gardens; whereas, the total number of trees planted commercially did not exceed 2,000, mostly in the central coastal plain.

Since the end of the fifties, many commercial orchards were planted in most parts of Israel (see map). By 1975, the total area had grown to 9,000 acres — about 900,000 trees. With the spring planting of 1982, the total area planted to avocados in Israel will reach about 30,000 acres — between 2.7 to 3 million trees. Of this area, about 50% is of fruit bearing age. Around 70% of the orchards planted are in the coastal plain.

Many rootstocks are used, depending mostly on soil and climatic conditions. West Indian rootstocks have been developed for use where irrigation water is of high salt content or in heavy lime soil.

All orchards are irrigated during the summer months, as there is no rainfall between April and October. The systems used again depend mainly on soil conditions, but the two main methods are individual low pressure sprinklers or drip irrigation, which, although first developed in Israel, was rather slow in being introduced in avocado orchards. The amount of water used varies very much, depending on the length of the dry season and local conditions. The average would be around 700 cubic meters per dunam (1,000 square meters, or about 1/4 acre).

Some years ago, many orchards were interplanted together with banana plantations two

to four years before uprooting the bananas. Economically, this gave very good results; but there were very many problems caused and the method, although still used in some places, has generally been discontinued.

No serious pests or diseases exist. *Phytophthora* has not been found in Israel, and we sincerely hope it will not appear in the future. Some pests do exist, however, the most serious being *Cryptoblabes quidiella* Mill. and *Pseudococcus longispinus* Targ. These are controlled biologically by the fly *Hungriella peregrina* Compere and *Anagyrus fusci entris* Gir. No orchards are sprayed by chemicals. Another pest present is *Boarmia selenaria* Sniff.; its natural enemies are two flies of the group *Tachinidae* and some wasps of the *Apanteles* group. Research continues.

Ettinger	September 15 – December 31
Fuerte	September 15 – March 31
Hass	January 15 – June 30
Nabal	December 15 – May 30
Benik	
Others	

Production and Export			
Year	Tons	Export Tons	% of Production to Export
1960-61	350	109	31
1965-66	2,060	933	45
1970-71	7,225	4,338	60
1975-76	17,850	14,500	84
1979-80	30,300	26,200	86
1981-82	37,700	32,000	85
1982-83	58,000	49,000	85

Expected Quantities for Future Production

1985-86	80,000 tons
1980-90	120,000 tons

The fruit is picked exclusively by the growers into bulk bins of about 380 kg. (836 lbs.) each and transported to one of the twelve regional packing houses owned by grower cooperatives in the different production areas. In no case is the distance to the packing

house more than 50 miles. All packing houses are supervised by the Fruit Production and Marketing Board.

Of the twelve packing houses, two — Milopri and Granot, the first near Acre and the second near Hedera — pack about 75% of the fruit produced. They are equipped with the most modern electronic computerized equipment. Their packing capacity is about 25,000 flats of 4 kg. net weight (8.8 lbs.) per eight-hour shift. Both were built to double their packing capacity when needed.

The fruit, once arrived in the packing house, is then refrigerated and packed. After packing, fruit is immediately transported to the port of Ash-dod, where it is again refrigerated until loaded on reefer vessels which transport it to the port of Marseille, France. From there, it is distributed to the whole of Europe. The journey takes exactly four days.

On arrival in the port of Ashdod, before being shipped to Europe or elsewhere, the fruit passes into the hands of "Agrexco" — the Agricultural Export Co. of Israel, a company owned jointly by the growers and the government (Ministry of Agriculture). Agrexco is the sole exporter of fresh fruits and vegetables from Israel and the exporter of about 60% of the flowers, as well as a large range of other fresh agricultural products ranging from live day-old chicks, cows, fish, et cetera.

Avocado growers are represented on the Fruit Board and Agrexco in various capacities, many times including the day-to-day operation. The writer of these lines, for example, was for many years the director of the fruit export department.

Agrexco exports 85% of all the avocados grown in Israel. (There is one private packer who handles about 15% of the export, having a past rate.) No new exporters can be added.

Sales are effected through Agrexco offices in most European capitals, the main office being in Paris (Rungis Market), with receiving offices in Marseille, for sea shipments, and in Cologne, Germany, for air-freighted produce — mostly flowers. Further branch offices are located in the U.K., Germany, Scandinavia, Italy, Benelux, Switzerland, and Austria.

Sales are on a commission basis, with the minimum price being fixed by Agrexco. During the Israeli season, October- May, about 85% of avocados marketed in Europe originate in Israel. Large-scale promotion is being done by Agrexco to prepare the market for the increased quantities expected in the not too far future.

The local market is very limited, as Israel has a small population — 4.5 million — the quantity having been sold on the local market this year being about 9,000 tons, which is around four pounds per capita, one of the highest consumption rates in the world (excepting, of course, Mexico).

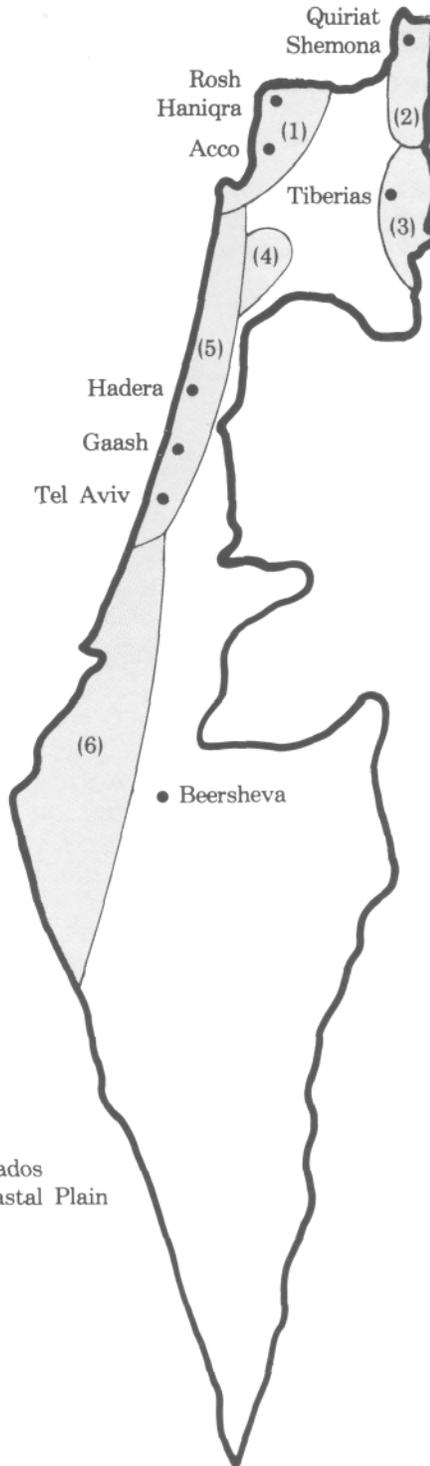
The main buyer of avocados is France, which takes about 70% of the total export quantity.

Return to the grower is still relatively high. The average last year was around 45 U.S. cents per pound, net. With increasing production per acre, especially from the newer orchards, we can still take a drop in price in the future when this will become necessary

by greatly increased quantities. Especially, our transportation costs, due to the closeness of the market, are considerably lower than our competitors — except, of course, Spain.

MAP OF ISRAEL

- (1) Western Galilee
- (2) Upper Galilee
- (3) Jordan Valley
- (4) Lower Galilee
- (5) Sharon Plain
- (6) South Negev



Main Growing Areas of Avocados
(1) and (5) Coastal Plain