

**Cotton in Israel**  
**Statement of the Israeli Delegation**  
**to the**  
**66<sup>TH</sup> Plenary Meeting**  
**of the**  
**International Cotton Advisory Committee**  
**Izmir, Turkey**  
**21-26 October 2007**

**Background**

Israel is a small but intensified cotton producer. For the last decade Upland and Extra long staple cotton are produced on some 10,000-20,000 hectares, which comprise up to 30% of the cultivated summer - irrigated field crops. Yields are on the rise and record highs of 2,020 Kg/Ha lint in Acala and 1,800 Kg/Ha lint in Pima were obtained during the 2005 season. Fluctuations in acreage until recent years were mainly due to dry winters that left the farmer with problems in the water supply for irrigation which resulted in a large reduction in acreage planted the next year. In the last few years lint prices have been the main motivation for farmers in their cotton planting acreage decisions.

Each bale of Israeli cotton lint is fully HVI classed and marketed according to quality specifications. Marketing is cooperative. Israel Cotton is exported via world-known international traders to the markets in the Far East, India, Turkey, European markets and South America.

**The Israel Cotton Board**

The Israel Cotton Production & Marketing Board Ltd. (ICB) was established in 1956 to help growers in marketing and production leadership. The ICB is a private company fully owned by the cotton producers..

The ICB is the sole cotton marketing organization in Israel. Its functions are:

1. Cotton lint marketing and sales. Central seed sales to local users (cattle feeders).
2. Quality classing of each bale: Lint by HVI, stickiness and neps by Lintronics FiberLab.
3. Financing of production through commercial bank loans.

4. Bulk supply of pesticides, herbicides and fungicides. Chemicals are stored in the growing regions to provide chemicals in lower prices according to seasonal usage.
5. Pest control extension and weekly active pest control headquarter meetings.
6. Research and development management with the collaboration of the Israel Ministry of Agriculture (Extension service).
7. Formal representative of cotton farmers to government offices, commercial companies, various other farmers' organizations.

### **Research and Development**

Cotton research and development in Israel is a nationwide effort carried out and implemented in all cotton growing regions of the country managed by the R&D director of the Israel Cotton Board (ICB).

Recent priorities have been breeding and variety development, integrated pest control and pest resistance to pesticide management, water-saving efforts, lint quality, weed and disease management, the innovation and adoption of new technologies.

### **Cotton and crop rotation**

Israeli cotton growers are free to farm, the decision of what to grow depends on the economical feasibility of alternative field crops. Crop rotation is a regular practice. A selection of crops, mainly summer -irrigated crops are rotated with cotton. These include corn, sunflowers, chickpeas, processing tomatoes, groundnuts and grain wheat (winter crop).

Allocation of cotton to "Acala" long staple "Acalpi" and extra-long staple "Pima" is also in the hands of the individual grower. This is generally determined by the price ratio and yield potential ratio between the three at the annual time of decision.

Crop rotation is well known to contribute to yields increase in many crops. Other factors in crop increase may include the discarding of marginal land for cotton production and a rise in the proportion of drip irrigation.

### **Pest control**

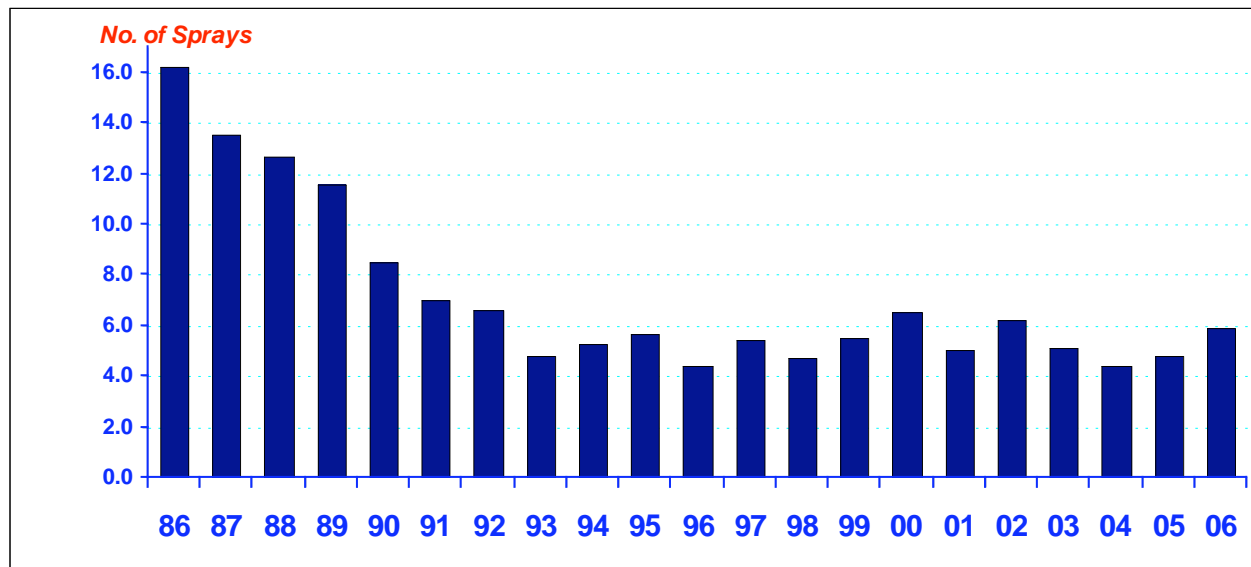
The implementation of combined IPM in pest control has contributed to the dramatic decrease in pesticide application in Israel (see chart).

This methodology comprises:

- Central pesticide usage policy guidelines and "window" usage methodology,
- Introduction of soft, relatively environmentally friendly pesticides such as Insect Growth Regulators (IGR's),

- The development and implementation of PBW pheromone control methods.
- Insect Resistance Management (IRM) follow-up and maintenance.
- Pest control extension
- Weekly active pest control meetings leading to a weekly newsletter sent by mail and posted on the web ([www.cotton.co.il](http://www.cotton.co.il)).

**Average No. of insecticides sprays in Israel cotton since the Implementation of IRM strategy (1987)**



**Yields advances**

Lint yield in Israel is on the rise for many years. During the past two seasons record lint yields were registered for both Acala (2,020 Kg/Ha) and Pima (1,800 Kg/Ha) (2005 season).

Variety performance has been a factor for both types of cotton. New Pima varieties have replaced Pima S varieties due to a proven lint yield advantage. New frontier is the new hybrid cotton which hopefully will take us forward in productivity.

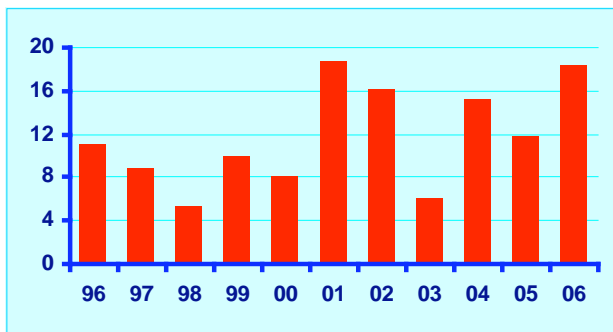
Precise and accurate implementation of resources and better crop management tools, along with better irrigation equipment and good agronomic performance are important factors in yield achievements. All that combined with good information net of experienced extension agents have most likely had a positive effect on the rise in yield.

**Extra Long Staple Pima in Israel**

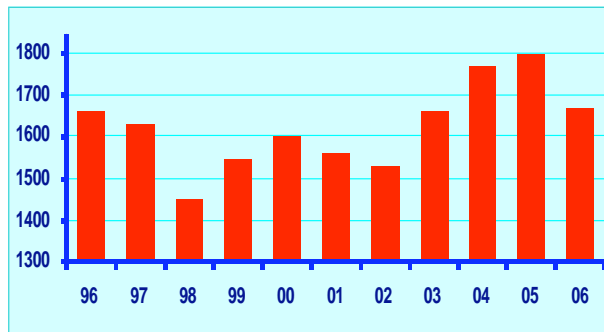
Long staple cotton has been grown in Israel since the 1950's. All long staple cotton fields are fully irrigated with no rainfall during the entire period of growth. First rains are expected from mid-October, and by that time all the cotton is usually picked, thus avoiding any rainfall damage.

Over the 1990's an improved variety PF-15 was introduced for commercial growth with high yield and better qualities and in 2001 a new variety **P-008** has become the dominator variety in the fields. Having improved yields and qualities such as better strength, lower neps counts, stable staple length and less susceptibility to leaf disease, it became the main variety.

**Pima Production in Israel '000 ton**



**Average Pima Yield – Kg per Hectare**



In recent years, the quality characteristics of Israeli Pima significantly improved, and yields were consistently improved. New varieties with good early yields and better qualities are already in advanced tests and will be commercial shortly.

New direction is with new Long Staple hybrid varieties like Acalpi. This variety is qualified as long staple cotton with very high lint yields on tough soils.

**A Comparison of Quality Parameters between P- 008 and Acalpi Varieties**

VARIETY	LENGTH	MICRONAIRE	STRENGTH (GPT)
<b>P-008</b>	<b>1 7/16"</b>	<b>3.8-4.1 Av. 3.9</b>	<b>38-41 Av. 39</b>
<b>ACALPI</b>	<b>1.3/8"-</b>	<b>3.5-3.9 Av. 3.7</b>	<b>34-36 Av.35</b>

**Summary**

Cotton plays an important role in field crop production in Israel. As a major summer crop, based on export and marketwise non-limited in size, highly intensive in manpower and other inputs, and as a knowledge-based crop dependent on state-of-the-art technology and know-how, cotton determines summer-irrigated field crop allocations.

Recent successes with pest control, utilization of recycled effluent water and other marginal water sources coupled with new varieties yield and quality achievements, assure that cotton will continue to be an important contribution to Israel field crop agriculture in the future.

Focusing on development of superior varieties with short growing seasons and higher yields as well as improving fiber quality characteristics will definitely give the Israel cotton advantages for the benefit of the growers and the end-users.