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## The Table Olive Sector

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**SUMMARY -** The sub-project "Processing of table olive", supported by Italian and Syrian Government Institutions, intended to promote table olive production in Syria. The main tasks have been the updating of state-of-art of raw and processed material production; a survey of main applied technologies and factories; the training of experts in processing and quality control of the table olive; the building of a new laboratory for the production of table olive. The state-of-art of raw and processed material production has been defined through a survey of the technologies utilized by the main Syrian Companies.

**Key words:** table olive, process lines, quality of processed table olive

**RESUME -** Le sous-projet «Processing of table olive» a été financé par les Gouvernements d'Italie et de Syrie au but de relancer la production Syrienne des olives de table. Les priorités du projet sont les suivantes: la mise à jour des donnés relatives à la production des olives et à la technologie de transformation; la formation d'experts en matière de procédés et du control de qualité; la création d'un laboratoire pour l'étude des techniques les plus modernes. On a visité plusieurs usines de production dans les Régions de Damas et d'Idleb et on a pris note des variétés et des niveaux de production.

Mots-clés: olives de table, lignes opératives, qualité des olives

### Introduction

The Italian and Syrian Government Institutions promoted a project to improve the olive sector in Syria, in view of the upcoming admission of this country into the European Community. The table olive and olive oil sector is very important in Syria. According to FAO statistics, Syria is the world's 5th olive producer, with 941 thousand tons in 2002, 20% of them processed as table olives (Al Ashkar, 2006). In the last decade the number of olive trees increased dramatically with an annual growth rate of 4%.

The Syrian table olive market represents about 2% of the olive oil market value and there are two different kinds of market: the fresh table olive for local consumption (family processing); the wholesale table olive (many wholesalers process a small quantity of olives in the traditional way for the local market or sell fresh olives to specialized processors) (Malevolti, 1999).

The main tasks of the sub-project Processing of table olives are the updating of state-of-art of raw and processed material production, a survey of most common technologies applied by factories, the training of experts in the processing and quality control of the table olive, the building of a new laboratory for the production of table olives.

The expected results of the project are: 1) to utilize the surplus of table olives expected in the next years when the young trees will be in full production; 2) to increase the profit of the Syrian Companies; 3) to increase the working opportunities; 4) to help the Companies in order to complete the process from harvesting to packaging; 5) to take into consideration other varieties (more resistant to diseases) native in Syria, especially in Palmyra area, where we can find a local cultivar 'abiad men omo' not yet marketed.

#### **Project related activities**

## Survey of table olive production

The state-of-art of raw and processed material production was defined through a survey of the technologies utilized by the main Syrian Companies. Four Companies were visited in Idleb, one in Aleppo and three in Damascus. The survey concerned also the olive varieties, the quantities, the packaging and marketing methods and the selling price.

Factories operating in the area around Damascus generally produce and subsequently trade table olives in accordance with the modern "farm to fork" philosophy which aims to minimize intermediary stages between production and marketing. The consumer is consequently more confident in the final product. The Companies of the Idleb area produce and sell to other wholesalers a semi-manufactured product but they lose most of the commercial profit.

The most important varieties processed, in the Aleppo, Idleb and Damascus areas, are: green and black sorani, green and black jlot, green and black kaissy and nibali. The quantities of processed table olives are shown in the following Chart 1.

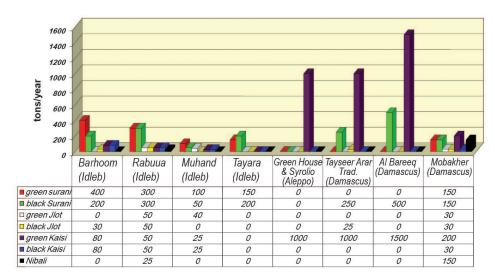


Chart 1: Varieties and quantities of table olives processed by different companies in Syria

In the Idleb area the Companies have small dimensions and they process a small quantity of different varieties. In Aleppo and Damascus areas there are big Companies that work with few selected varieties (green kaissy and black sorani). The Chart 2 shows the quantitative distribution of each cultivar processed.

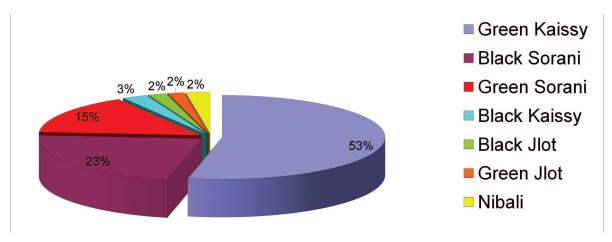


Chart 2: Quantitative distribution of the table olive cultivars processed in Syria

Green and black Sorani and green Kaissy are the most important varieties with 91% of total quantity processed.

In the Idleb area the Companies have only a few workers (10-15 unit/year) and utilize the natural fermentation to process of the table olive. The main applied technologies are:

- Processing of green sorani and kaissy varieties: harvesting by hand, transport in plastic boxes (20 kg), grading, washing, crushing with two cylinders, dipping in salt solution (16-17 % of NaCl), natural fermentation until the marketing. The olives for sale are put in plastic buckets of 6 to 10 kg and the cover solution is the same solution used for the fermentation.
- Processing of black sorani and kaissy: harvesting is made by hand and the olives are transported in boxes of 20 kg to the company. The olives are sorted to remove the damaged fruit, graded, put in the plastic containers (80 kg) with tap water for 15 days; than the olives are removed from the first tap water and put in plastic boxes to fix the colour. The olives are then washed for two days with tap water; during these two days the olives are left in the open air and the operators remove the olives by hand. The olives are put in big containers (80 kg), added with salt solution (16% of NaCl) (Photo 1). After the natural fermentation they are left in those containers until the market. The companies put the olives in buckets of 7 kg and add a new cover solution (10% of NaCl) with pieces of lemon.



Photo 1: Plastic containers for the natural fermentation of the table olive

The Idleb Companies produce many kinds of table olive: whole fruit, stoned, stuffed, halved, sliced (Photo 2 and 3).



Photo 2 and 3: Many kinds of table olive processed in Idleb

The Companies in the Idleb area process many vegetable products like carrots, cucumbers, peppers, garlic; they put these vegetables in salt solution 10% and add them to the processed table olives. All firms from Idleb sell the processed olives mainly to Lebanese buyers. The price of sale is the same for

all factories: 70 Syrian lire/kg for big size green kaissy; 50-55 for small size; 125 Syrian lire/kg for big size green sorani; 80 for middle size and 50 for small size.

The process lines are generally the same for all the Companies in Idleb:

- i). not one firm applies the debittering of the olives;
- ii). all the companies use the same salt quantity for the fermentation;
- iii). all the companies process green and black sorani
- iv). a few companies process green and black kaissy and jlot. One company process cv nibali.
- v). there is no company that takes care of quality of the finished products; the colour is different due to many spots on the skin.
- vi). there is no company that sells directly to the distribution chain.

The Companies of Damascus area have many workers (200 unit/year), apply to table olives the debittering with alkaline method and sell the packed product to the retailers.

The main technologies applied are:

- Processing of green kaissy variety: harvesting, sorting, washing, treatment with lye solution (2% NaOH) for different times with respect to the olive dimension (Photo 3). Then the olives are washed every 6 hours for 3 or 4 times. After that the olives are put in big fibreglass containers, placed underground, and covered with salt solution (7-10% NaCl) for the natural fermentation (Picture 3). After the fermentation the olives are sterilized for 15 min at 120°C
- Processing of black sorani and jlot varieties: harvesting, sorting, grading, washing with tap water for 7-10 days. After washing the olives are put in plastic bags to obtain the oxidation of the skin pigments. The olives in the bags are left 3-4 days at room temperature, until a good colour is achieved. The olives are then put in salt solution (15-16% NaCl) for the natural fermentation. A few Companies add CaCl<sub>2</sub> (0,1-0,5%) to the salt solution. The black olives, after natural fermentation, can be crushed or not. The whole olives (not crushed) can be treated with lye solution, if they are too bitter. After that the olives are canned with cover solution (4% or 7% NaCl) and sterilized at 120°C for 15 min.

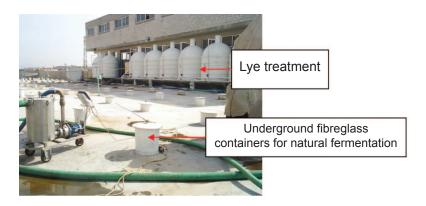


Photo 4: Fibreglass containers for lye treatment and for a natural fermentation of table olives.

The Tayseer Arar Trading Company produces in Damascus many kinds of packets of processed olives (1/2, 1, 3, 5, 8 kg) and sells them directly (Photo 5). The Kaissy olives are exported to Europe, USA, Canada, Australia and many Arabian Countries. The Sorani olive are only sold in local markets.



Photo 5: Different kinds of table olive packaging produced by a Damascus Company

#### **Conclusions**

High quality table olives need the careful supervision of the operators in each step of the process, from the harvest to the market. However, no processing company in Syria grows the olive trees but they buy the fruit generally in the "suk" or directly from the growers.

The Damascus companies apply the Sevillian Method for green kaissy olives and the Greek method for black sorani olive; they package the final products and sell the table olives directly to Europe, USA and Canada. The Idleb companies sell the final products to wholesalers of Lebanon, Emirates, USA, Canada, Australia.

Non traditional cultivars native in Syria, more resistant to diseases must be taken into consideration in order to improve the table olive market. In Palmyra area, for example, there is a typical cultivar with fruit of white colour, not yet marketed, named "abiad men omo" (Photo 6). Despite of the small quantity produced, it is interesting to study this cultivar in depth in order to know how the quality changes during the process.



Photo 6: Typical cultivar of table olives (white) not yet marketed

## References

Al Ashkar H., (2006). *Olive oil comparative advantages*. Working paper No 19. Project GCP/SYR/006/ITA. May 2006.

Brighigna A., (1998). Le olive da tavola. Ed. Edagricole, Bologna (Italy).

International Olive Oil Council (IOOC), (2004). Trade standard applying to table olives. Madrid IOOC.

Malevolti I., (1999). *Olive and olive oil sub-sector*. Project GCP/SYR/006/ITA. Final report, Damascus Syria. August 1999.