STATUS OF ORGANIC COTTON PRODUCTION IN TURKEY

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Introduction

- Cotton production has been improved in yield and quality by contributions of scientific and technological innovations.

- Increased sensitivity to health and environmental issues has caused development of new subjects such as organic agriculture.
Introduction

- Cotton sold as organic requires a third party certification by an independent, accredited certification agency, except producer and private sector.
- Further in the processing chain, care must be taken not only to separate organic cotton from conventional cotton, but also to ensure environment-friendly processing.

Importance of organic cotton

- Increasing consciousness about conservation of environment as well as of health hazards caused by agrochemicals has brought a major shift in consumer preference towards organic production particularly in the developed countries.
- Global consumers are increasingly looking forward to organic production that is considered safe and hazard-free.
Cotton is considered ‘the dirtiest crop’ of the world due to heavy use of insecticides and hazardous pesticides to human and animal health.

- Cotton covers 2.5% of the cultivated land in the world.
- Cotton is being sprayed with 16% of the world's insecticides.

Importance of organic cotton

- Organic cotton has been considered as a niche product or niche-market product up to now, but textile sector relevant to organic cotton with the effects of consumer awareness is being started to move from a niche market to mainstream with the contributions of many clothing companies.
Organic Cotton Producer Countries

- Conventional cotton is produced in over 60 countries.
- Organic cotton was grown in 23 countries by the 2010/11 growing season.
- Those countries were Bangladesh, Benin, Brazil, Burkina Faso, China, Egypt, Greece, India, Israel, Kyrgyzstan, Mali, Nicaragua, Pakistan, Paraguay, Peru, Senegal, South Africa, Syria, Tanzania, Turkey, Tajikistan, Uganda, and the USA.
- Most production was grown in India, Syria, China, Turkey, the United States, Tanzania and Uganda, respectively.

Global Organic cotton production

- Organic cotton now represents 1.1 percent of global cotton production.
Organic cotton production was declined 35 percent from 241,697 MT in 2010/11 to 151,079 MT last year.

### Organic Cotton Production in Turkey

#### Organics Seed Cotton Production (Ton)

<table>
<thead>
<tr>
<th>Province</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<td>1.706,40</td>
<td>1.716,00</td>
<td>253,00</td>
<td>2.315,26</td>
<td>1.730,67</td>
<td>1.088,13</td>
<td>2.068,07</td>
<td>2.326,05</td>
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<td>Denizli</td>
<td>232,54</td>
<td>264,86</td>
<td>1206</td>
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<tr>
<td>Canakkale</td>
<td>10,00</td>
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<tr>
<td>G. Antep</td>
<td>75,00</td>
<td>135,00</td>
<td>60,00</td>
<td>-</td>
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<td>Hatay</td>
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<td>1.090,00</td>
<td>-</td>
<td>25,60</td>
<td>70,00</td>
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<td>2.497,42</td>
<td>2.216,74</td>
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<td>Mersin</td>
<td>228,00</td>
<td>319,00</td>
<td>154,00</td>
<td>170,00</td>
<td>175,00</td>
<td>68,50</td>
<td>867,21</td>
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<td>Sanliurfa</td>
<td>21.928,00</td>
<td>19.647,40</td>
<td>25.321,10</td>
<td>52.780,00</td>
<td>39.382,12</td>
<td>57.822,28</td>
<td>6.107,87</td>
<td>22.506,03</td>
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<td>Mardin</td>
<td>1.220,00</td>
<td>855,00</td>
<td>-</td>
<td>84,00</td>
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<td>637,08</td>
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<td>Adiyaman</td>
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<td>480,00</td>
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<td>-</td>
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<td>K. Maras</td>
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<td>-</td>
<td>188,83</td>
<td>-</td>
<td>252,10</td>
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<td><strong>TOTAL</strong></td>
<td>32.654,00</td>
<td>30.268,65</td>
<td>33.206,00</td>
<td>60.421,05</td>
<td>55.535,07</td>
<td>68.310,70</td>
<td>11.737,86</td>
<td>32.076,18</td>
<td>15.857,32</td>
</tr>
</tbody>
</table>

**Global Cotton Production in the World**

- **Organic Cotton Production** declined 35 percent from 241,697 MT in 2010/11 to 151,079 MT last year.
- The total production in Turkey can be further explored in the table above.
Although Turkey has a great potential for organic cotton production, various problems are experienced during the production phase.

- Turkey has a good knowledge on organic farming and is one of the leading countries in this regard.
The amounts of organic cotton production change significantly over the years due to the reasons such as climatic factors, intensity of diseases and pests, marketing problems, and inaccurate data on production amounts reported by private companies.

The oppression of large chemical pesticide trusts in the market is a matter of concern. Such companies are worried about declines in their market shares of chemical preparations used in conventional agriculture due to increasing biological preparations used in organic production.

They convey their negative ideas about organic agricultural production to the producers.
During organic cotton production, it is necessary to give more importance the subjects in plant nutrition,
- Appropriate rotation programme
- Green manure applications
- Biological preparations
- Preparing compost.

The market for organic cotton is held by a small and specific buyer segment, and this situation leads to marketing problems.

- The companies that entered the market first in organic cotton production do not want the organic cotton go out of their control therefore the increase in production is limited.
One other thing that Turkey has to do in relation with organic cotton is establishment of an organic cotton stock exchange.

Although we have been producing organic cotton for a long time, and even though we were placed near the top of the list in some years (i.e. 2006), an organic cotton stock exchange could not have been established in our country yet.

This is a significant requisite for our country, which will lead to improvements in organic cotton production.
In Turkey, sometimes there are problems in supplying organic cotton seeds. The producers face difficulties in years when organic seed production is not sufficient. The organic cotton seeds should not contain GMOs, and they should not be delinted with chemicals. The cotton seeds in Turkey are GMO-free. The ban on the import of seeds with GMOs into the country is a great advantage for Turkey.

In addition, the cotton seed, used as an organic animal feed, is an important source of nutrition for organic livestock farming with its significant protein content.
Conventional cotton seed oil may be inconvenient in some food products because of higher chemical residues, therefore organic cottonseed oil may gain importance since it is cheap and reliable.

Also it needs a careful selection of varieties adapted to local conditions such as climate, soil and resistance to pests and diseases.
In Turkey, there are large number of cotton varieties available on the seed market provided by research stations and seed companies. Unfortunately, there is still lack of breeding activities for organic farming.

Considering the demands of producers and consumers of cotton and textile manufacturers of specific products requiring organic and natural colored cottons have to be bred to make progress in this field.
Natural colored cotton’s future depends on continuous improvement of fiber quality, appropriate manufacturing process and market demand.

Thank you for your attention