

BEEKEEPING COLLABORATION BETWEEN TURKEY AND ISRAEL

Dr. Shimon Barel, Kimron Veterinary institute, Ministry of Agriculture
Dr. Deniz Zilberman, Kimron Veterinary institute Ministry of Agriculture
Mr. Haim Efrat, Extension services, Ministry of Agriculture

Background

Urbanization, modern agriculture and large utilization of pesticides of both countries have caused a decrease in the traditional entomological habitat of the honeybees. The continued maintenance and survival of the honeybees depend today on beekeeping industry policies. Understanding and preventing the risks of disappearing bee syndrome and protecting the natural habitat of the honeybee against the dominant, dangerous, non-productive bee species are main part of the mutual beekeeping policies. In order to proceed sustainable agriculture and economical development both countries' natural resources should be protected.

Colony Collapse Disorder (CCD), which is a global challenge of beekeeping including Israel and Turkey, threatens the industry and can reduce agricultural productivity in many countries. Development of the apicultural industry, which is an essential component of the agricultural infrastructure, will enhance the economic growth of the both states. Production of high quality, safe apiary products for the local consumer, which can also compete in the international market, depends on knowledge, knowhow and technology transfer between two states.

Beekeeping also has a large range of touristic aspects as honey festivals and agro-api tourism. Both countries have long apiculture history. Unique and special honeys can attract tourists to both states and it can contribute to tourism.

Subjects of particular interest to both countries:

1. Research Colony Collapse Disorder (CCD), *Varroa mite*, viruses, Nosemosis and other pathogens.
2. Production of safe, high quality honey and apiary products for the local and international markets. Implementation HACCP concept in the control of the honey and apiary products.
3. Pollination with honeybees, *Bombus* and other types of bees dedicated to this purpose.
4. Reduction of contaminants in honey and apiary products. Reduction of intense use of pesticides in agriculture to improve food safety and quality. Rational use of pesticides and veterinary drugs.
5. Research on bee feeding, communication, and conductivity process in honeybees.
6. Development of safe, unique innovative apiary products, with high market potential based on local culture of each country (Good Apicultural Practice).
7. Improvement on apiary tools, hive infrastructure products and beeswax recycling.
8. Enhancement and fostering of queen bees to increase and *Varroa mite* resistant bees.
9. Research and development on bee diseases' identification, epidemiology, symptoms, control, prevention and treatment.

For the implementation of this collaboration the following steps shall be considered:

1. Meetings to discuss beekeeping research, and trade policy issues in particular in subject matters, which are of mutual, interest and benefit.
2. Conferences taking place at least once in two years with participation of the both countries' beekeepers, private, governmental and scientific experts in apiary industry.
3. The both countries will proceed to share knowledge, technology, equipments to develop methods in aim to produce safe and high quality apiary products for the consumers, to improve the ability of export and to compete in international markets.
4. Visits by beekeepers, scientists, technical experts, students or officials to discuss and to make collaborative research programs on the subjects mentioned above.
5. Organize exchange programs and courses for scientists, students, and beekeepers.
6. Participation to international beekeeping projects to solve regional beekeeping problems.
7. Touristic events for both countries' apiary industry representing the local culture and history.
8. This collaborative activity should lead to participation of other Middle East Region countries like Palestinian Authority, Egypt, Jordan and Syria.