BEST PRACTICES

Pollen Atlas of the beekeeping plants of Cyprus

Institutional information
Name of contact person: Ministry of Health via State General Laboratory of Cyprus & Ministry of Agriculture, Rural Development and the Environment
Email of contact person: **info@sgl.moh.gov.cy**
Name of institution: State General Laboratory of Cyprus & Ministry of Agriculture, Rural Development and the Environment
Region and Country where the case study took place: Rural areas of Cyprus and Nicosia
Website: www.moh.gov.cy/sgl/

Summary

Explain your case in one or two sentences
In the effort of the General State Laboratory to continue safeguarding the quality and authentic origin of all food products it procured this Atlas amassing the beekeeping plants specific to Cyprus. Through melissopalynology (the study of pollen in honey) the Atlas would assure the geographical region of the honey's origin, the genus of the plants used by bees in making any particular honey and its nutritional and constitutional background thus helping beekeepers avoid unfair competition, improve the local sustainability of beekeeping and safeguard the public by providing a healthier and authentic product.

Background information: How was the situation previous to your actions?
Free commerce allowed the importation of a great variety of honey of unknown quality, chemical consistency and origin that also left loopholes of mislabeling and misinform the Cypriot consumer. All this led to unfair competition to Cypriot beekeepers, the uncertain quality of honey consumed by the public and presented public health issues.

What were the needs you identified?

- Managing unfair competition
- Safeguarding the health of the public
- Incorrect or misinforming honey labelling
- Honey consistency
- Supporting the sustainability of Cypriot beekeeping meant helping the environment and its bee-dependent crops through more successful pollination.

What solution you found to cover those needs?

By amassing and listing beekeeping plants that are specific to Cyprus, through melissopalynology, laboratories can now specify whether the honey is produced in Cyprus, whether if its monofloral honey and if its labelled as the correct flower genus and if its tampered by any means affecting its consistency.

What actions did you take to reach the solution?

Collecting beekeeping plants - The collection of beekeeping plants was carried out from various areas of Cyprus (Anafotia, Anglissides, Alaminou, Kiti, Alethriko, Maroni, Aradippou, Zygi, Agios Theodoros, Akapnou, Melini, Akrotiri, Achelia, Kokkinotrimithia, Peristerona, Dromolaxia, Paleochori, Aradippou, Kamares, Aplanta, Mazotos, Agros, Macheras, Agia Anna, Klaudia, Arediou, Kaimakli, Alethriko, Nicosia), at the appropriate stage of flowering.

Preparation of Pollen Sample slides – For the preparation of the slides the Louveaux et al (1978) method was used.

Identification of pollen samples – The morphology shape and size of each of the 120 types of pollen was identified and taxonomized in the Atlas.

The collection and taxonomy of plants was conducted by **Christos Tofaris** (Department of Agriculture) and the laboratory analysis and evaluation were conducted by **Xenia Iacovou** (State General Laboratory).

If any, which partners or other organisations did you involve during the process?

500 character limit.

N/A

What were the main problems or difficulties you had to face?

450 character limit.

N/A

What is the situation now, after your actions?

500 character limit.

N/A

Main lessons learned along the way? *

450 character limit.

N/A

Annex:

- The **Pollen Atlas of the beekeeping plants of Cyprus (**Greek): https://www.moh.gov.cy/Moh/SGL/sgl.nsf/All/2F63A07A805B88CAC22583C5003E696C?OpenDocument
- Methods of melissopalynology (Louveaux et al (1978): http://chemistry.armstrong.edu/nivens/Chem3300/methmels.pdf