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Good beekeeping practices

Summary

Apiculture (beekeeping) is the practice of honeybee management in hives for pollination, production of honey and other products such as wax, royal jelly, propolis and pollen. In addition, an important aspect of beekeeping is the production of bees, queens, package bees, etc. Good beekeeping practices involve proper management of the apiary that can prevent bee diseases and, at the same time, allow to obtain high quality products respecting the consumer's health.

Description

Good beekeeping practices that normally should be adopted in the apiary involve:

- inspection the surroundings to place the apiaries in appropriate areas: non-humid, not exposed to cold winds, not subject to pollution sources such as intensive agriculture and industrialization (Fig.1); selection of suppliers, of bees and beekeeping equipment and verification of the health status of swarms, colonies and queen bees;



- observation of quarantine measures for all new introductions that have to be made in the apiary;
- identification of each hive by applying a unmistakable numerical code for purposes of hive individuation and subsequent documentation (Fig.2);



Fig.2: Hives identification with numerical and graphical signs

- regular verification of the health status of the colonies during the year through the inspection of the bees, the new combs. The frequency of these checks depend on the season: reduction of the inspections during winter time and under unfavourable weather conditions (Fig.3);



Fig.3: Hives inspection

- controls on the productivity and resistance to illness;
- frequent renewal of honeycombs (every 2 years) and regular replacement of queens (every 1-2 years), selection of queens who show resistance to diseases, hygienic behaviour, docility, low tendency to swarm and high productivity;
- maintenance of colonies at similar strength, ensuring that hive capacity is sufficient to discourage swarming; preventing acts of looting (not having in apiary highly diseased, weakened colonies that are more subject to be sacked; perform maintenance of hives);
- adoption of appropriate techniques to ensure the welfare of colonies, especially those younger / weaker (feeding colonies ^{GO TO BOTTOM} having no food stocks or in case of unfavourable weather conditions as in autumn, winter and excessively cold or rainy spring; ensuring good wintering; providing adequate water supplies particularly in hot periods, etc.);
- provision of candy or glucose/fructose syrup avoiding the use of honey to feed the bees. verification of origin and wholesomeness of supplies provided to the bees;
- appropriate use of the bee smoker (respecting the bees welfare and avoiding using toxic material that can contaminate the honey);
- elimination of the use of toxic substances or paints for hives (e.g. disinfectants, chemical treatments for wood, etc.);
- elimination of the transfer of honeycombs from one colony to another if the health status of the colonies is unknown. Separation of the sick from the healthy hives; destroying, if necessary, infected colonies;
- exclusive application of drugs registered for use in bees respecting instructions and guidelines and recording drug use in the logbook. Improper and untimely use of chemicals during honey production may lead to its contamination;
- periodic mowing of grass in front of the hives;
- maintenance of the apiary and the beekeeping equipment in good order and clean; ensuring the required maintenance and, when necessary, renewing the materials;
- referral to expert assistance in case of anomalies, whenever necessary.

Please note that applying good beekeeping practices in the apiary does not mean the bees will not get sick any more, but the incidence of diseases decreases.

See related technologies published on TECA by Apimondia and IZSLT on bee diseases:

1. Good beekeeping practices
2. [Main diseases of honey bees](#)
3. [Nosemosis](#)
4. [Varroa mites \(Varroaosis or Varroosis\)](#)
5. [AFB \(American Foulbrood\)](#)
6. [EFB \(European foulbrood\)](#)
7. [Bee viruses](#)

Authors:

Formato G. (Istituto Zooprofilattico Sperimentale del Lazio e della Toscana - Italy), Menegotto A. (Conservation Global - South Africa), Jannoni-Sebastianini R. (Apimondia - International Federation of Beekeepers' Associations - Italy), Good beekeeping practices, 2015

See also

[Buenas Prácticas Apícolas - Chile](#)

Further reading

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Keywords

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[Beehives](#)
[honey bees](#)

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Apimondia

Apimondia, the **International Federation of Beekeepers' Associations**, is the world organisation representing the interests of apiculture and aims to facilitate links between beekeepers, scientists and all involved with apiculture. Apimondia stems from the International Committee of Apicultural Congresses created in 1893 holding the first congress in 1897 in Belgium. Apimondia in its current institutional form was founded in the Netherlands in 1949 and its core business is the organisation of international apicultural congresses and symposia. Today Apimondia work remains truly international: Apimondia is run on a basis of co-operation between beekeepers and scientists from many countries as well as international organisations. A special feature of Apimondia is the wide range of working languages used in publications and at meetings.



You can also visit **Apimondia** linked websites to find out more:

www.apimondia.org

www.apimondia2013.com

www.apimondia2015.com

www.beethecampaign.org

Apimondia, la **Federación Internacional de las Asociaciones de Apicultores**, es la organización mundial que representa los intereses de la apicultura y su objetivo es facilitar los vínculos entre los apicultores, los científicos y todos los involucrados con la apicultura. Apimondia deriva del Comité Internacional de los Congresos Apícolas creado en 1893 y con la celebración del primer congreso en 1897 en Bélgica. Apimondia, en su forma institucional actual, fue fundada en los Países Bajos en 1949 y su actividad principal es la organización de congresos y simposios apícolas internacionales. Hoy el trabajo de Apimondia permanece verdaderamente internacional: Apimondia realiza su programa sobre la base de la cooperación entre los apicultores y los científicos de muchos países, así como organizaciones internacionales. Una característica especial de Apimondia es la amplia gama de idiomas utilizados en las publicaciones y en las reuniones de trabajo.

Para más informes puede visitar los sitios web de Apimondia:

www.apimondia.org

www.apimondia2013.com

www.apimondia2015.com

www.beethecampaign.org

Contacts:

Contact person: Riccardo Jannoni-Sebastianini

Contact email: Riccardo.Jannoni@fao.org

Contact person: Apimondia Secretary

Contact email: apimondia@mclink.it

Web: <http://www.apimondia.org/>

Country: Italy

IZSLT - Istituto Zooprofilattico Sperimentale del Lazio e della Toscana “Mariano Aleandri”

The Istituto Zooprofilattico Sperimentale del Lazio e della Toscana “Mariano Aleandri” (IZSLT) is a public body operating in the frame of the National Health Service with duties related to animal health and welfare and food safety. In such areas it provides services in the diagnosis of animal diseases and zoonoses, microbiological, chemical and physical controls over safety of foods, food production chains and animal feed. In the same areas it performs research, epidemiological surveillance, continuous training and international cooperation activities.

IZSLT's mission is to ensure that animal health and welfare, hygiene of farms, primary productions, safety of foods and animal feed comply with the relevant legislation.



To effectively fulfill its mission, the Institute carries out:

- diagnostic service over animal diseases and zoonoses;
- scientific and technical support to veterinary and public health services for controls on animals, food and feed;
- laboratory tests to verify the health status of animals;
- technical and scientific support to monitor veterinary medicines;
- research on animal health and welfare, food safety and hygiene of farming and livestock products;
- studies on animal welfare and development of alternatives to the use of animals in experiments;
- studies to monitor the safety of food of animal origin and feed;
- scientific and technological cooperation with other research institutes;
- epidemiological surveillance on animal health and food safety, on livestock products and on environmental factors affecting the above;
- studies on the health risks for humans linked to animals and animal products;
- support, technical assistance and hygiene information to manufacturers of food of animal origin;
- production of vaccines and laboratory diagnostics for the improvement of animal health.

In the frame of IZSLT activities, the Apiculture Unit's mission (<http://www.izslt.it/apicoltura/>) is to certify and guarantee the health and welfare of bees, and the hygiene and safety of the hive products, through: diagnosis of bee diseases and analyses on hive products, support to Governmental Institutions in drawing up legislation, research activity, collaboration with other laboratories or institutions, technical support and training for operators, pollution environmental monitoring using honey bees and protection of honey bee biodiversity.

Contacts:

Contact person: Giovanni Formato
 Contact email: giovanni.formato@izslt.it
 Web: <http://www.izslt.it/izslt/>
 Country: Italy



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