

BPRACTICES (ERA-NET SusAn) PROJECT: towards a sustainable European beekeeping

Jorge Rivera-Gomis¹, Antonella Cersini¹, Magali Chabert², Marie-Pierre Chauzat², Roberto Eggenhoeffner³, Serkan Erat⁴, Ales Gregorc⁵, Walter Haefeker⁶, Mariano Higes⁷, Riccardo Jannoni Sebastianini⁶, Charlotte Lietaer⁸, Philip McCabe⁶, Rudolf Moosbeckhofer⁹, Dilek Muz⁴, Mustafa Necati Muz⁴, Nurullah Ozdemir⁴, Marco Pietropaoli¹, Licia Ravarotto¹⁰, Alexandra Ribarits⁹, Marie-Pierre Riviere², Maja Ivana Smodis Skerl¹¹, Giovanni Formato¹

¹Istituto Zooprofilattico Sperimentale delle Regioni Lazio e Toscana, Via Appia Nuova 1411, 00178 Roma, Italy

²ANSES, Honeybee pathology unit, European Union Reference Laboratory for bee health, 105 route des Chappes, CS 20111, 06902 Sophia Antipolis, France

³University of Genova, Biophysic Section of Department of Surgery Sciences and Integrated Diagnostics (DISC), Corso Europa 30, 16132 Genova, Italy

⁴University of Namik Kemal, Kampus Street, 59030 Tekirdag, Turkey

⁵Mississippi State University, Center for Costal Horticulture Research, PO box 193, 39470 Poplarville, MS, USA

⁶International Federation of Beekeepers' Associations, Apimondia, Corso Vittorio Emanuele 101, I-00186 Roma, Italy

⁷Centro de Investigacion Apicola y Agroambiental de Marchamalo, C/Camino San Matin s/n, 19180 Marchamalo, Spain

⁸Tecnologies and practices for small agricultural producers (TECA) platform of the Food and Agriculture Organization of the United Nations (FAO), Viale delle Terme di Caracalla, 00153 Rome, Italy

⁹Austrian Agency for Health and Food Safety, Spargelfeldstrasse 191, 1220 Vienna, Austria

¹⁰Istituto Zooprofilattico Sperimentale delle Venezie, Viale dell'Università 10, 35020 Legnaro (Padova), Italy

¹¹Agricultural Institute of Slovenia, Hacquetova ulica 17, 1000 Ljubljana, Slovenia

Animal production is facing important problems worldwide, for example the global spread of diseases or the increasing demand of quality and quantity in food production. Beekeeping sector, even if it has peculiarities comparing to the other animal production systems, is not an exception, and it need to find its way into sustainability and resilience in order to adapt to the present and future challenges.

These demands include improvement in competitiveness, resilience and productivity, enhancement of environmental sustainability and consumer acceptability and address societal challenges associated with animal welfare, product quality and safety, biodiversity and provision of ecosystem services.

The BPRACTICES project (Fig. 1) was created in order to satisfy the requirements of the beekeeping sector in the given context. BPRACTICES is the acronym of “New indicators and on-farm practices to improve honeybee health in the *Aethina tumida* era in Europe”.



Figure 1. *BPRACTICES logo*

This project is funded by the European Union’s Horizon 2020 research and innovation program ERA-NET SusAn – European Research Area on Sustainable Animal Production Systems (Fig. 2). The target of the project is the development of a sustainable bee breeding system by implementing innovative management practices in beekeeping (Good Beekeeping Practices - GBPs).



Figure 2. *Logo of the European Research Area on Sustainable Animal Production (ERA-NET SusAn)*

The project consortium, coordinated by the Istituto Zooprofilattico Sperimentale del Lazio e della Toscana “M. Aleandri” (Italy), includes partners from five European countries: University of Namik Kemal (Turkey), Agricultural Institute of Slovenia (Slovenia), Centro de Investigación Apícola y Agroambiental de Marchamalo (Spain), Austrian Agency for Health and Food Safety (Austria), and Istituto Zooprofilattico Sperimentale delle Venezie (Italy). Moreover the project involves: the International Federation of Beekeepers Association (Apimondia), the University of Genova (Italy), and has the valuable collaboration of the European Union Reference Laboratory for Bee Health (ANSES, France), the Mississippi State University (USA) and of the Food and Agriculture Organization of the United Nations (FAO) Technologies and practices for small agricultural producers (TECA) platform.

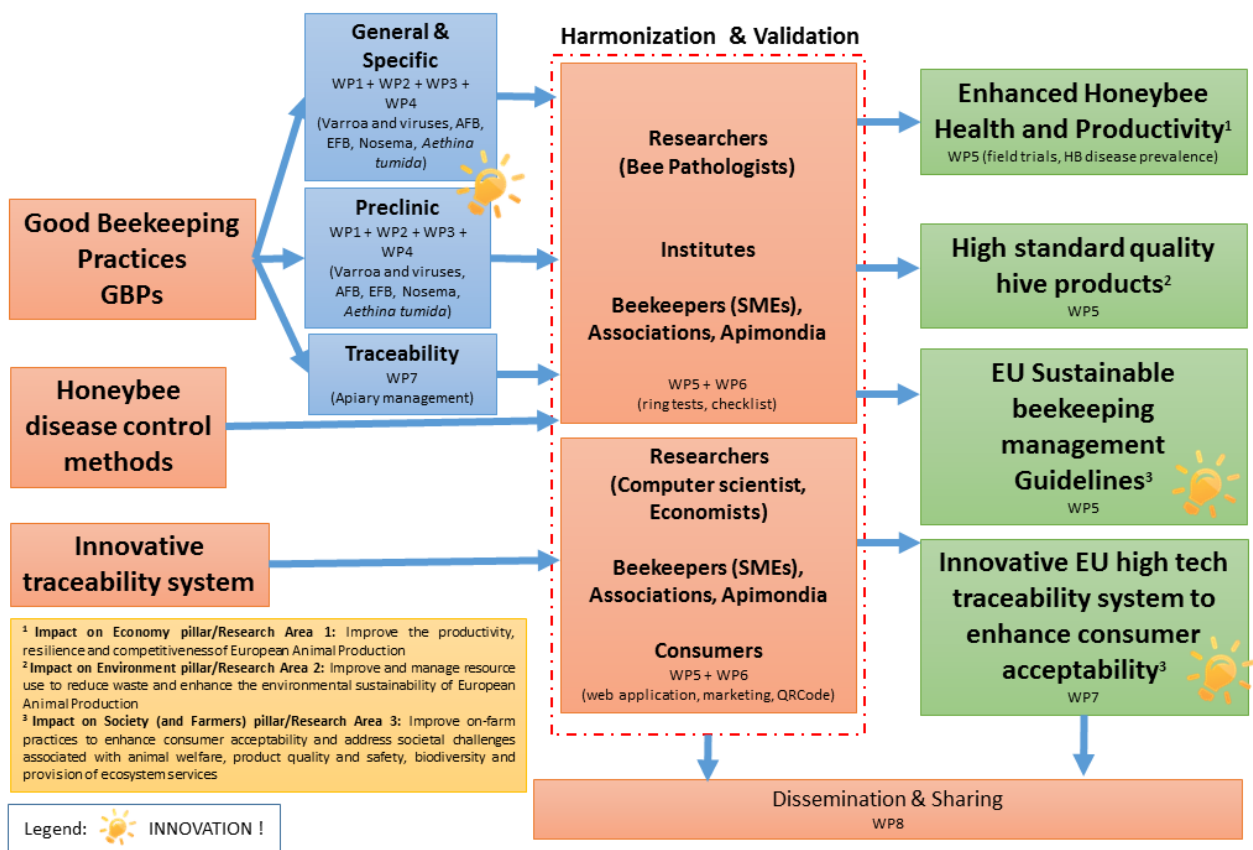
The objectives of BPRACTICES include:

1. prevention and control of the main honeybee diseases adopting proper good beekeeping practices (GBP);
2. economic evaluation of competitiveness and resilience of European beekeeping;
3. development of an innovative traceability system that will benefit beekeepers and consumers giving information on the product’s origin;

4. approval at the apiary level of all the innovations developed within the project and
5. dissemination of results by communication activities to ensure the visibility and sharing of the project results.

The avoidance of chemical treatments and the guarantee of quality and safety of hive products will be priority. This goal will be reached in collaboration with APIMONDIA.

Consumer acceptance and knowledge will be assessed by collecting data to identify weaknesses and strengths and optimize the system.



Scheme of the B-PRACTICES Project