PROJECT KICK-OFF PRESENTATION

Bpractices NEW INDICATORS and ON-FARM PRACTICES TO IMPROVE HONEYBEE HEALTH in the *Aethina tumida* ERA IN.

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WP5 - "Validation".Lead:Partner 2 Duration: 36 months (01/02/2017-01/02/2020)

The WP 5 of the **BPRACTICES** project aims at validating at the apiary level all the innovations developed in the project, using multidisciplinary strategies, thanks to the combination of scientific research and on-field experience. It includes the participation of an expert team integrated by researchers that combine different specialities and abilities, with the practical and useful experience of the beekeepers *thanks to Apimondia collaboration*. The implementation of this innovative production system will be applicable to every European country and it will be

applied to beekeeping at all levels (professional and hobbyists beekeepers).

The economical validation of the innovations delivered by the BPRACTICES project will be carried out by WP6.

- WP5 **Objectives**:
- - Collaboration with WP1, WP2, WP3, WP4 and WP 7
- - Validation at the apiary level
- - Validation of the laboratory methods
- - Analysis of the compliance and feasibility of the innovative production system for hobbyist and professional beekeeping at international level
- Description:
- WP5 will collaborate with WP1, WP2, WP3, WP4 and WP7 and will involve Apimondia, FAO TECA platform and the beekeepers' associations to identify the general and disease-specific GBPs.
- Afterwards, in the wake of the collaboration with beekeepers, the GBPs will be approved and their applicability both for professional and for hobbyist beekeepers will be verified through the use of a checklist. A compliance and feasibility study of the new management system will be published.
- The best control methods at the apiary level will be validated with *specific field trials*,
- carried out with *shared protocols* between the partners, and the *economic impact of their application* will be quantified in collaboration with WP6.
- Laboratory methods will be validated through international ring tests.
- The results of the trials and the ring tests *will be an integral part of the EU Guidelines* that will be distributed through the new traceability system (WP7) and the training/dissemination activities (WP8).

- In order to obtain a complete list of GBPs, *valid for different types* of European beekeeping and its climatic conditions, all the partners will involve the national and international beekeeper associations.
- Subtask 1.1
- Coordination of the participation of national and international beekeeper associations for the definition of GBPs.

- A checklist of GBPs identified by partners in <u>WP1-WP2-WP3-WP4-WP7 will be submitted with an online</u> <u>procedure to beekeepers of different EU countries</u>, in collaboration with their local associations and Apimondia international events (e.g. Symposia), to verify their applicability in the daily activities in the apiary.
- Subtask 2.1
- Compilation of the complete GBPs list deriving from WP1, WP2, WP3, WP4 and WP7
- Subtask 2.2
- Compilation of a specific checklist to verify the applicability of GBPs for Professional beekeepers
- Subtask 2.3
- Compilation of a specific checklist to verify the applicability of GBPs for hobbyist beekeepers
- Subtask 2.4
- Publication of the checklist on an online platform and distribution (with the collaboration of WP8)
- Subtask 2.5
- Collection in an online database, statistical analysis, A compliance and feasibility study for hobbyist and professional beekeeping at the international level will be published considering also the results of task 3 and WP6.

- Field trials will be realized to verify how the application of the GBPs (preclinic, general and specific) and the best control strategies identified in WP1-WP2-WP3-WP4 will be able to influence quantity and quality of hive products.
- Each partner will apply GBPs and control strategies in affected hives of varroa, AFB, EFB and *Nosema spp.* Each apiary will be formed with 25 hives that will receive different control strategies.
- For SHB: in Italy, Partner 1 will verify in the affected area the efficacy of 8 different mechanical traps with or without lures;
- in the US, Partner 6 will realize a trial with 25 hives treated with different control methods and GBPs. Analyses will be performed on honey samples obtained from Partners to validate the biosensor method for *Kodamaea ohmeri* and OF residues.
- Subtask 3.1
- Coordination of the field trials (Apimondia and)
- Subtask 3.2
- Analysis of results
- Subtask 3.3
- Publication of results (preparation of common papers)

- All the innovative laboratory methods for preclinic identification of the honey bee diseases will be harmonized among project partners, in collaboration with the European Union Reference Laboratory for Bee Health (ANSES) and validated through international ring tests.
- Subtask 4.1
- Development of specific international ring tests about the laboratory methods to be applied to the matrices obtained with the innovative GBPs identified by WP1, WP2, WP3 and WP4 to prevent new clinical cases of diseases.
- Subtask 4.2
- Analysis of the results of ring tests
- Subtask 4.3
- Definition of laboratory analysis guidelines

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- month End
- 5.1 1 7 List of EU harmonized GBPs
- 5.2 7 24 Study of applicability of GBPs
- 5.3 17 36 Field trials
- 5.4 17 36 Validation of the laboratory methods

