



## BEE FOR BIO

# Determining selection objectives and beekeeping practices in OA

EXPLORATORY  
PROJECT  
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### Coordination

Florence Phocas,  
UMR GABI  
florence.phocas  
@inrae.fr

Anne Lauvie,  
UMR SELMET  
anne.lauvie@inrae.fr

### Keywords

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Changes in scale of OA in terms of beekeeping still face many challenges: availability of organic food resources, control of biological pests (including Varroa), organic genetic beekeeping resources, etc. Genetic improvement is one of the levers used to address these challenges.

It is important to determine how to select honeybees to meet the expectations of organic beekeepers and to evaluate the relevance of selection strategies specifically devoted to organic farming. The project therefore has the dual ambition of understanding the diversity of practices already implemented in terms of genetic management among organic and non-organic beekeepers in order to identify possible specificities, and of contributing to the co-design of collective selection programs adapted to OA. The project brings together three INRAE units and researchers from three scientific disciplines, in partnership with ITSAP and several beekeeper collectives.

It will be based on interviews with organic and non-organic beekeepers from the partner collectives in order to understand their practices, and on questionnaires and joint design workshops to define and prioritize the relevant selection objectives within each collective.

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Contact METABIO  
metabio@inrae.fr



## **INRAE units**

**UMR GABI**, Jouy  
**UMR SELMET**,  
Montpellier  
**UR A&E**, Avignon

## **Partners**

ITSAP  
ADAPI Provence  
ADA Occitanie  
ADANA Nouvelle  
Aquitaine  
Agri Bio Ardèche

The project will focus on the following research questions:

1. What are the beekeepers' individual strategies and practices in terms of genetic management and in relation to all of the different aspects of the system (OA certification, honeydews targeted, production areas, product optimization, constraints and opportunities related to the coexistence between organic beekeeping and agriculture, etc.)?
2. How are genetic resources collectively managed and what are the links with the diversity of systems in these collectives?
3. What are the specificities and the generalities of the selection objectives (importance given to the different traits in organic and non-organic systems, but also according to the beekeepers within or between networks)?

The first question, of particular relevance to the zootechnics of the breeding systems, will benefit from the contributions of genetics and the management sciences to shed light on the various dimensions of the related systems. The second question, which is related to the management sciences, will take the contributions of zootechnics into consideration to characterize the diversity of systems, as well as those of genetics concerning the management of selected populations. Finally, the last question, more specifically linked to quantitative genetics, will take account of the contributions of the project as a whole and of the contributions of the three disciplines involved.

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metabio@inrae.fr

