## **News From the IoBee Project**



BeeLife is a partner of the Internet of Bees (IoBee), a project funded by the European Commission to help improve the health of bees. IoBee is based on technological developments for improved internal and external beehive monitoring. It also counts with the application of spatial decision support systems. The project kicked-off during the first semester of 2018 and has been continuously advancing towards becoming a relevant instrument for beekeepers. One of the main pillars for its development, however, has been its close relation to beekeepers, always trying to take their expertise into account. For this reason, the partners, including BeeLife, have organised and participated in several events, workshops, collaborations, surveys and field tests. To this date, these efforts continue.

IoBee has participated in several Congresses. From technology-focused ones, such as the Internet of Things Solutions World Congress (IOTSWC), to the National Beekeeping Congress in Spain, IoBee is working to make a name for itself among the diversity of beehive monitoring systems. It has also organised several workshops around Europe to understand the needs and challenges of the beekeeping sector better. In collaboration with beekeeping and farming associations such as <a href="UNAAPI">UNAAPI</a> (Italy), <a href="FFAP">FFAP</a> (France), <a href="COAG">COAG</a> (Spain), there has been an open communications channel with beekeepers. Besides, IoBee has even participated in the Beecome European Beekeeping Congress. The project has expanded its horizons and continues to collect lessons from the beekeeping sector.

IoBee partners have also organised several workshops with important representatives of the beekeeping sector. For example, in March 2019, the project was also present in a meeting with the European Professional Beekeepers Association (EPBA), introducing the nature of the project and its most recent developments. The project also counts with the in-house expertise of BeeLife, including direct feedback from both bee-health scientists and professional beekeepers, including its president, Francesco Panella.

Besides sharing information and experiences with beekeepers, IoBee is also conducting field tests. Monitoring systems and their interface are being put to the test in real-life conditions. The project is working to reach a more precise measure of parameters such as weight, activity, temperature and flight time. Additionally, it is also focusing on the improvement of data visualisation, striving to have one of the most user-friendly interfaces in the market. Thanks to the feedback of beekeepers, the user interface is more and more comprehensible, providing users with timely and relevant information.



Digital monitoring user interface

Field tests have begun in some locations as Italy and Belgium, and are being set up in France, Romania and Spain. Besides, a parallel field test is also taking place across the Atlantic, in the almond fields of California, where monitoring systems are being used to measure the impact of fungicides in bees.



Installation of digital monitoring systems in California

IoBee keeps progressing, moving forward for a better understanding of bee health thanks to improved monitoring. It still aims to disrupt the beekeeping market by providing effective, timely and user-friendly monitoring systems, along with cloud applications that integrate infield monitoring with satellite imaging. The project and the work mentioned so far is operated by the following consortium partners from different countries of the European Union: Irideon, Arnia, Technological Educational Institute of Crete, Avia-GIS and BeeLife European Beekeeping Coordination.

For more information, visit io-bee.eu or contact info@io-bee.eu