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Forum Links

Pan-european assessment, monitoring, and mitigation of stressors on the health of bees



Iorizon 2020 Research and In





Dalel ASKRI, PhD

Platform BioPark Archamps (Archamps, France) For the Consortium





This project receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 773921

PoshBee: a five-year project 2018-2023

Leader & Coordinator: Pr. Mark Brown



- ✓ 43 Partners from across
 Europe
- ✓ 14 European countries
- ✓ 7 Beekeeping associations
- ✓ 8 Farming organisations
- ✓ 4 Companies

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 ✓ 24 Academic and government research organisations



Effects of pesticides, pathogens, nutrition and their interactions on bee health



New tools for risk assessment of bee health



Effects of pesticides, pathogens, nutrition and their interactions on bee health





PoshBee: WorkPackages (WPs)



WP9_OMICS of agrochemical responses in bees

MALDI-TO Spotting of haemolymph samples with matrix onto the MALDI target 20 3000 4000 5000 6000 7000 8000 2000 10000 Mass Fingerprints & Statistical Models (30 // // /exp.condition) **Objectives: Selection & Identification** Reference mass fingerprints Statistical models to classify stressors

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Characterization & Marker Selection (pools, 3 replicates) Objectives: Identification and characterization of stress markers

- Protein identification and quantification
- ☑ Gene ontology and biological pathway analysis

WP9_OMICS of agrochemical responses in bees Data integration

Data compilation and integration to:

✓ ANSES findings on agrochemicals, principal pathogens, and pollen diet

✓ CREA transcriptomic findings

An integrated and dynamic European database of omic changes in response to agrochemical and/or pathogen exposure and nutritional stress

A multi-scale monitoring tool for sanitary policy and beekeeper best practice



WP9_OMICS of agrochemical responses in bees Data integration





Prof. S. Potts, WP 10: Impact Strategy and Knowledge Exchange, PoshBee AGM2, Marseille, France





Acknowledgments





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Philippe BULET

PhD, CNRS WP9 Leader





Karim ARAFAH PhD, BioPark Deputy Leader

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∿ KEYWORDS

environmental health, apiculture, entomology, environmental stressors, animal physiology, animal health

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🛎 CONSORTIUM
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42 partners from 14 European countries

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DURATION
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June 2018 - May 2023

WEBSITE
 poshbee.eu

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PAN-EUROPEAN ASSESSMENT, MONITORING, AND MITIGATION OF STRESSORS ON THE HEALTH OF BEES

EU Horizon 2020 Research and Innovation Action



https://poshbee.eu/

Thank you for your attention



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