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Editor's Note

The Third International Congress on Bee Sciences was successfully held online. We are delighted to have offered this event free of charge. It was an honor to bring together experts from various fields of bee sciences. This Congress allowed to exchange of innovative ideas and fostering the development of new research and collaborative projects. With 44 invited speakers representing 30 countries and a scientific committee composed of nearly 300 distinguished scientists from over 65 countries, the congress truly reflected global participation. We extend our heartfelt thanks to everyone who contributed and supported the event. We look forward to seeing you at our next congress.

Warm regards from Turkey!

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Abstract:
Beekeeping provides a livelihood for thousands of people in the countries of the Mediterranean basin thanks to the activity of many indigenous subspecies of honey bees, which evolved over thousands of years in the Mediterranean through natural selection. . It is expected that all actions that promote the protection of this invaluable genetic heritage will have a positive impact not only on beekeeping production, but also on agricultural production and, therefore, on increasing food availability, thus contributing to effectively solve the problem of food, economic and sustainable security. However, climate change can directly and indirectly affect the performance and survival of honey bee populations. This concern is particularly relevant in the Mediterranean, where periods of drought are expected to become more and more frequent and longer, reducing the potential for beekeeping production as well as the efficiency of pollination and agricultural production potential. Unfortunately, our ability to cope with the problems of one subjected to rapid environmental changes is limited, due to the poor understanding of the adaptation mechanisms developed by different Mediterranean subspecies during evolution; that is, there is a lack of basic knowledge to design future conservation and enhancement programs aimed at preparing bee stocks for environmental changes. It is in this context that the The MEDIBEES project was born, the main objectives of which are: (1) to study the genetic heritage of the nine subspecies of bees cited above, (2) to understand the molecular bases and mechanisms of their adaptation to different environmental conditions encountered in the Mediterranean, (3), assess its conservation status and (4) study assess its resilience to climate change. Furthermore, the issues related to (5) the valorization of honey and (6) the beekeeping of derived products will be addressed in MEDIBEES, in order to help beekeepers improve their income and promote the sustainability of the beekeeping activity.

Keywords: Local bee, conservation, climate change, honey, valorization