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# BOOK OF ABSTRACTS

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## SESSION XI

### XI - SOCIAL INSECTS, ETHOLOGY AND APIDOLOGY

#### POSTER

### Anthophilous Apoidea and beekeeping in the context of the Life VAIA Project

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The Life VAIA project (Enhance the reforestation of damaged forests with Innovative Agroforestry), funded under the LIFE Programme 2014-2020 of the European Community, involves the development of innovative intervention techniques for the reconstruction of forests, through which it is possible to promote the adaptation of forest vegetation to climate change. It was born from the idea of innovatively managing some areas devastated by the Vaia storm which, between October and November 2018, with hurricane-level wind gusts and heavy rains, caused extensive damage from flooding and wind damage in Italy and neighboring countries. The highly innovative element of the project is the use of the agroforestry strategy as a solution to deal, in the short and long term, with the damage caused by extreme weather events. This strategy allows investing in the production of organic products with minimal impact, increasing biodiversity and the sustainable use of resources (energy through renewable sources and water through rainwater collection). Furthermore, the production strategy focused on local resources and the redevelopment of damaged areas allow to limit the economic damage suffered by the communities that live in the affected areas. In the Life Vaia project, the anthophilous Apoidea and beekeeping play an important and strategic role. The destruction of many forest areas has left room for a new flora, which for some decades, until natural and guided reforestation, will be able to support both a growing community of pollinators and a more profitable beekeeping activity than a forest environment is able to do. In the Italian pilot sites, sedentary apiaries have been created and managed according to the Biodiversity Friend Beekeeping certification protocol to verify the quantity and quality of beekeeping production. It is from these experimental apiaries that the “rebirth honey” was obtained. Anthophilous Apoidea are one of the key targets of the project and for this reason, from 2022 to 2024, a network of monitoring transects was set up in the three Italian pilot sites (Altopiano di Pinè in Trentino and Altopiano dei Sette Comuni and Altopiano del Cansiglio in Veneto), through monthly sampling using pan traps, to study the population of these insects, which are essential for the conservation of ecosystems. In 2024, the same monitoring was also carried out in the pilot site in France and in the one in Spain. In addition, beehotels and some artificial nests (Domus mellifera by World Biodiversity Association) were positioned to encourage the natural settlement of *Apis mellifera* swarms and the subsequent monitoring of the colonies that will start from them, without any beekeeping management. The project included the transplantation of native food plants with a strong nectariferous and pollen-producing value and therefore important both for supporting the pollinator communities and for the plant products that these plants can provide. The samples of anthophilous Apoidea sampled in all the pilot sites are being studied but what is emerging is a complex fauna that is very different between the sites. The sedentary beekeeping activity and the analysis of productivity and products will continue for the entire duration of the project and then be transferred to local beekeepers.

**KEYWORDS:** Apoidea Anthophila, western honey bee, beekeeping, Vaia storm