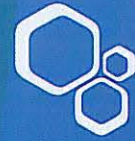


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BEYOND THE HIVE: BEEKEEPING
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*Oral presentation abstracts
& poster list*

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Bee Biology

Wednesday, 2 October

Afternoon Session: Symposium 3
Langstroth hall, Chair: Maria Bouga

14:30–14:50	Italy	Reintroduction Plan For The Endangered Sicilian Black Bee <i>Apis Mellifera Siciliana</i> <i>Cecilia Costa</i>	Page 124
14:50–15:10	Portugal	Patterns Of Single Nucleotide Polymorphism (Snp) Variation: Further Insights Into The Complex History Of The Iberian Honeybee <i>Maria Alice Pinto</i>	Page 124
15:10–15:30	France	Preserving Local Bee Population And Beekeeping Heritage In A French National Park <i>Lehébel-Péron Ameline, Schatz Bertrand, Dounias Edmond, LeBorgne Floriane</i>	Page 125
15:30–15:50	Jordan Germany	Observations On <i>Apis Florea</i> In The Middle East And North Africa Region <i>Cristiano Menezes, Ayrton Vollet-Neto, Vera Imperatriz-Fonseca</i>	Page 125
15:50–16:10	Turkey	Landmark And Outline Methodologies For The Discrimination Of Honey Bee Subspecies Distributed In The Middle East <i>Ayca Ozkan Koca, Irfan Kandemir</i>	Page 126
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17:20–17:40	China	Multivariate Morphometric Analysis Of <i>Apis Mellifera</i> In Yili River Valley Of Xinjiang <i>Zhiguang Liu</i>	Page 127
17:40–18:00	Bénin	Morphometric Characteristics Of Bees' <i>Apis Mellifera Adansonii</i> In Benin <i>Paraiso Armand, Abiola Waliou, Glele-Kakaï Romain</i>	Page 128
18:00–18:20	Russia	European Dark Bee Populations In Russia <i>Alexey Nikolenko</i>	Page 128

Symposium 3

Reintroduction Plan For The Endangered Sicilian Black Bee *Apis Mellifera Siciliana*

Organization: Consiglio per la Ricerca e la sperimentazione in Agricoltura – Unità di ricerca di Apicoltura e bachicoltura

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The subspecies *Apis mellifera siciliana*, autochthonous to the Italian island of Sicily, is threatened with extinction due to hybridization with *A. m. ligustica*, introduced into the island by beekeepers when commercial beekeeping became widespread (1970s). Today a small population of *A. m. siciliana* survives mainly on a few small islands belonging to the Eolie archipelago, thanks to the will and determination of a single beekeeper who has been breeding this race for the past 20 years.

Now a project for conservation of this subspecies is running, funded by the Sicilian Regional government and coordinated by the Honey bee and Silkworm Research Unit of the Agricultural Research Council (CRA-API). Several Sicilian institutions and beekeeper associations are involved for the 3-year course of the project.

The main goal of the project is the reintroduction of the subspecies on the main island, by distribution of large numbers of queen cells derived from pure *A. m. siciliana* queen mothers to beekeepers located mainly in the Western part of the island. These queen cells develop into queens that are then used for drone production the following year and whose progeny is analysed to assess contamination level of the area in which they were mated. According to the results, management suggestions are provided to involved beekeepers. A parallel aim is the establishment of protected mating stations for the pure breeding of this race on the mainland island, as currently pure breed mating is limited to conservation islands, thus not available for a larger number of beekeepers.

Last but not least, the project envisages sampling of Western Sicilian bee populations, in order to find new lineages to minimize inbreeding on the conservation islands.

Patterns Of Single Nucleotide Polymorphism (SNP) Variation: Further Insights Into The Complex History Of The Iberian Honeybee

Organization: Mountain Research Centre (CIMO), Polytechnic Institute of Bragança

Address: Mountain Research Centre (CIMO), Polytechnic Institute of Bragança, Campus de Sta. Apolónia, Apartado 1172I, Bragança, 5301-855, Portugal

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The Iberian Peninsula harbours the greatest honeybee genetic diversity and complexity in Europe. The challenge of deciphering the mechanisms underlying such complexity has led to numerous morphological and molecular marker-based surveys of the Iberian honeybee. Yet, in spite of the numerous studies, the evolutionary processes underlying patterns of Iberian honey bee genetic diversity remain poorly understood. Early phylogeographical studies of morphology and allozymes revealed the existence of a gradient extending from Africa to northern Europe, with Iberian honeybees showing intermediate phenotypes. This pattern raised the hypothesis of an African origin and a mechanism of primary intergradation for the Iberian honeybee (and the black honeybee) origin. Maternal patterns tell a different history. Mitochondrial DNA (mtDNA) surveys have revealed the co-occurrence of highly divergent lineages forming a south-north cline, a pattern that is more compatible with a recent secondary contact hypothesis. Adding to the complexity, microsatellite variation supports neither hypothesis as microsat-

- Colombia** **Evaluation Of Two Types Of Energy Supply For Native Stingless Bee *Melipona Eburnea* (Apidae: Meliponini) In Colombian Andes Mountains, South America** BB47
Cesar Augusto Talero Urrego (zootecnia.fusagasuga@mail.unicundi.edu.co), Andrea Castro Jimenez, Victor Manuel Solarte Cabrera
- Brazil** **Gene Expression Patterns Underlying Adult Brain Development Of *Apis Mellifera* Castes** BB48
Angel Roberto Barchuk (barchuk@unifal-mg.edu.br), Heloisa H. S. Gianelli, Aline Vomero dos Reis, Márcio Tadeu de Oliveira, Lívia M.R. Moda, Joseana Vieira, Ana D. Bomtorin, Zilá L. Paulino Simões
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Marcelo Nicolás Agra (apibalc@balcarce.inta.gov.ar), Silvia Lanzavecchia, Pablo Corva, Jorge Cladera, Maria Alejandra Palacio
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Snežana Milovac (snezana.milovac@dbe.uns.ac.rs), Danijela Kojić, Tatjana Nikolić, Jelena Purać, Željko Popović, Elvira Vukašinović, Gordana Grubor-Lajšić
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Dora Henriques (dorasmh@gmail.com), Julio Chavez-Galarza, John Johnston, José Carlos Rufino, Maria Alice Pinto
- Brazil** **Hygienic Africanized Honey Bees Are Better Pollen Collectors Than Non-Hygienic Africanized Honey Bees** BB60
Clycie Aparecida Da Silva Machado (lsgoncal@usp.br), Lionel Segui Gonçalves
- Russia** **Influence Of Honeybees And Beekeeping On Stability And Rehabilitation Of Biocenoses** BB61
Igor Mishin (sgsha@smoltelecom.ru)