



From 21 to 25 September 2011

APIMONDIA 2011
Buenos Aires - Argentina

Posters

www.apimondia2011.com
info@apimondia2011.com



QUEEN REARING AND SELECTION PRACTICES AND THEIR IMPACT ON THE GENETIC DIVERSITY AND FITNESS OF HONEY BEE COLONIES

Maria Bouga¹; [Gérard Arnold](#)²; Malgorzata Bienkowska³; Ralph Buechler⁴; Lionel Garnery⁵; Fani Hatjina⁶; Evgeniya Neshova Ivanova⁷; David De Jong⁸; Pilar De la Rúa⁹; Meral Kence¹⁰; [Nikola Kezic](#)¹¹; Per Kryger¹²; António Murilhas¹³; Benjamin Oldroyd¹⁴; Randy Oliver¹⁵; María Alejandra Palacio¹⁶; Plamen Petrov¹⁷; Maria Alice Printo¹⁸; Albert Robertson¹⁹; Peter Rosenkranz²⁰; Damir Šekulja²¹; José Manuel Flores Serrano²²; Remy Vandame²³

¹Lab of Agricultural Zoology & Entomology, Agricultural University of Athens - 75 Iera Odos Str., 11855, Athens, Greece - +302105294564 - mbouga@aua.gr

²[Laboratoire Evolution Génomes et Spéciation, CNRS - UPR 9034, avenue de la terrasse, 91198 Gif-sur-Yvette, France, +33 169 82 37 17 +33 69 82 37 36- Gerard.Arnold@legs.cnrs-gif.fr](#)

³Institute of Horticulture in Skierniewice, Apiculture Division - Kazimierska 2, 24-100 Pulawy, Poland - +48818864208 - +48818864209 - Malgorzata.bienkowska@man.pulawy.pl

⁴Landesbetrieb Landwirtschaft Hessen, Bee Institute - Erlenstrasse 9, 35274 Kirchhain, Germany – ++49 6422 940613 – ++49 6422 940633 – ralph.buechler@llh.hessen.de

⁵Laboratoire Evolution Génomes et Spéciation, Bât. 13, avenue de la terrasse, 91198 Gif-sur-Yvette, France, +33 169823718 - garnery@legs.cnrs-gif.fr

⁶Hellenic Institute of Apiculture, N.AG.RE.F. - N. Moudania, 63 200, Greece - +302373091297 - +302373091676 - fhatjina@instmelissocomias.gr

⁷Department of Developmental Biology, University of Plovdiv - 24 Tsar Assen Str. Plovdiv Bulgaria - +359 32 261 549 - geneiv@uni-plovdiv.bg

⁸Genetics Dept., Faculty of Medicine, University of Sao Paulo - 14.049-900 Ribeirao Preto, SP, Brazil - 55 (16) 3602 4401 - ddjong@fmrp.usp.br

⁹Área de Biología Animal, Dpto. de Zoología y Antropología Física, Facultad de Veterinaria, Universidad de Murcia - 30100, Murcia, Spain - +34 868 884908 - +34 868 884906 - pdelarua@um.es

¹⁰Middle East Technical University, Department of Biology - 06800 Ankara, Turkey - +903122105169 - +903122107976 - mkence@metu.edu.tr

¹¹[Faculty of Agriculture, University of Zagreb, Croatia +385 98 316 469 - nkrzic@agr.hr](#)

¹²Research Centre Flakkebjerg, Aarhus University - DK-4200 Slagelse, Denmark - +4589993629 - +4589993501 - per.kryger@agrsci.dk

¹³University of Evora – ICAAM, 7002-554, Evora, Portugal - (351)266760866 - murilhas@uevora.pt

¹⁴Behaviour and Genetics of Social Insects Lab, School of Biological Sciences A12, University of Sydney NSW, Australia - +61 (2) 9351 7501 - benjamin.oldroyd@sydney.edu.au

¹⁵Golden West Apiaries—14744 Meadow Dr. - Grass Valley, CA, USA - 530.277.4450 - randy@randyoliver.com

¹⁶Unidad Integrada INTA-FCA-UNMdP C.C 276. 7620. Balcarce. Bs As. Argentina. 54 - (2266) 439100 int 732 - tiruggi@infovia.com.ar

¹⁷Agricultural University of Plovdiv - 12, Mendeleev Str. Plovdiv 4000, Bulgaria - info@nrp-bg.org

¹⁸Mountain Research Centre. Polytechnique Institute of Bragança - Campus de Santa Apolónia, Apartado 1172, 5301-855 Bragança, Portugal - +351273303389 - +351 273325405 - apinto@ipb.pt

¹⁹Meadow Ridge Enterprises LTD - Box1 ,GS602,Saskatoon,Saskatchewan,Canada.S7K 3J9 - (306)373-9140 - a.j.robertson@sasktel.net

- ²⁰University of Hohenheim, Apicultural State Institute - D-70 599 Stuttgart, Germany - +49-(0)711-459-22659 - peter.rosenkranz@uni-hohenheim.de
- ²¹Polytechnic of Rijeka – Trpimirova 2/V, 51000 Rijeka, Croatia – +385/98/9463363 – +385/51/211270 – dsekulja@veleri.hr
- ²²Departamento de Zoología Universidad de Córdoba, Campus de Rabanales 14071, Córdoba, Spain - +34 957 21 86 98 - ba1flsej@uco.es
- ²³Línea de Investigación "Abejas de Chiapas", El Colegio de la Frontera Sur San Cristóbal de las Casas, Chiapas, Mexico - +52 (967) 674 9000 ext. 1426 - remy@ecosur.mx

The Apimondia working group on honey bee diversity and fitness (AWG 7) was created on October 25, 2010 as a Scientific Working Group of Apimondia. The aim of this AWG is to collect information on honey bee queen rearing practices, and examine their impact on the genetic variability and general health of honey bee colonies. The AWG consists of 23 members from 16 different countries. The world wide survey being conducted by this AWG is focused on gathering information on how selection methods, instrumental insemination, disease management procedures, introduction of exotic bee lines, queen replacement strategies, and loss of local colony populations due to introduced parasites and pathogens, affect the ability of our bees to survive and reproduce. The information collected will contribute on an international level to our understanding of how apiculture practices affect honey bee genetics, health and productivity.