

APITHERAPY

Session 6: APITHERAPY

Apitherapy and Products from the Hive

Session 22: STANDING COMMISSION ON APITHERAPY

Apitherapy Around the World

Apitherapy: POSTERS

BEE BIOLOGY

Session 1: STANDING COMMISSION FOR BEE BIOLOGY

The Role of Race Characteristics in Beekeeping

Session 11: BEE BIOLOGY

Solitary Bees

Session 15: BEE BIOLOGY

General Biology and African Races of Bees

Session 21: BEE BIOLOGY

The Capensis Phenomenon in South Africa

Bee Biology: POSTERS

BEE PATHOLOGY

Session 5 : BEE PATHOLOGY

Effect of Trade in Bees on the Spread of Pests and Diseases

Session 7 : STANDING COMMISSION ON BEE PATHOLOGY

Diagnosis and Control of Varroa Disease: A New Bee Pest in Africa

Session 12: BEE PATHOLOGY

Diagnosis and Control of Varroa Disease: A New Bee Pest in Africa

Session 25: BEE PATHOLOGY

American Foulbrood: Early Detection and Control

Bee Pathology: POSTERS

BEEKEEPING ECONOMY

Session 2: BEEKEEPING ECONOMY

Difficulties and Successes Since the Africanised Bee

Session 17: STANDING COMMISSION ON BEEKEEPING ECONOMY

Local and International Trade in Bee Products

Beekeeping Economy: POSTERS

BEEKEEPING FOR RURAL DEVELOPMENT

Session 4: STANDING COMMISSION FOR BEEKEEPING FOR RURAL DEVELOPMENT

Beekeeping Against Poverty

Session 8 : BEEKEEPING FOR RURAL DEVELOPMENT

Achieving Beekeeping Extension

Session 16 : BEEKEEPING FOR RURAL DEVELOPMENT

Beekeeping Development in Africa

Beekeeping for Rural Development: POSTERS

BEEKEEPING TECHNOLOGY AND EQUIPMENT

Session 3: BEEKEEPING TECHNOLOGY AND EQUIPMENT

Honey Quality

Session 10: STANDING COMMISSION ON BEEKEEPING TECHNOLOGY AND EQUIPMENT

Appropriate Technology for Professionals and Enthusiasts

Session 13: BEE TECHNOLOGY AND EQUIPMENT

The Application of Pheromones

Session 23: BEEKEEPING TECHNOLOGY AND EQUIPMENT

Session 24: BEEKEEPING TECHNOLOGY AND EQUIPMENT

Focus on Queen Production and its Management

Beekeeping Technology and Equipment: POSTERS

POLLINATION AND BEE FLORA

Session 9: POLLINATION AND BEE FLORA

Bee Forage for Honey Production in Africa

Session 14: STANDING COMMISSION ON POLLINATION AND FLORA

Bee Forage and Genetically Modified Crops

Session 19: POLLINATION AND BEE FLORA

Pollination of Fruit Crops

Session 20 : POLLINATION AND BEE FLORA

Modern Seed Production

Pollination and Bee Flora: POSTERS

SESSION 6: APITHERAPY

Apitherapy and Products from the Hive

Abd El Hady, F.K. and Hegazi, A.G. National Research Center (Egypt) <i>Egyptian Propolis, Chemical Composition and Biological Activity</i>	ahmedgaffer@mail.scu.eun.eg	5
Domerego, R. (Belgium) <i>Bee Products for Medicine Protocols</i>	roch.domerego@euronet.be	522
Komatsubara <i>Propolis and Redox State</i>		521
Krivopalov-Moscvin, I.V. and Babin A.A. International Medical Center of Alternative and Traditional Medicine (Russia) <i>Apinarcotherapy Method Innovating Alcohol Addiction Treatment by Means of Bee Venom</i>	api-center@chel.surnet.ru	199
Hegazi, A. National Research Centre (Egypt) <i>Apitherapy in Egypt and Arabian Countries</i>	ahmedgaffer@mail.scu.eun.eg	518
Mateescu, C. IITEA Apimondia (Romania) <i>The Apitherapy CD-ROM</i>		520
Cherbuliez, T. (USA) <i>Activities of the Apitherapy Commission</i>	tcherbuliez@cyburban.com	519

SESSION 22: STANDING COMMISSION ON APITHERAPY

Apitherapy Around the World

Krivopalov-Moscvin, I.V., Rosenfeld, S.P. and Belenina, T.N. International Medical Center of Alternative and Traditional Medicine (Russia) <i>Apitherapy in Treatment of Multiple Sclerosis</i>	api-center@chel.surnet.ru	200
Herro, M.R. (Canada) <i>Therapeutic Effects of Honey and Diabetes Hypoglycaemia</i>	rmherro@yahoo.com	94
Vit, P. Universidad de Los Andes (Venezuela) <i>Effect of Stingless Bee Honey in Selenite Cataracts</i>	vitpat@cantv.net	291
Kwon, M.S., Han, Z.Z., Park, S.Y., Choi, Y.S., Lim, H., Kim, S.D. and Kim, H.C. Kangwon National University (Korea) <i>Effect of Water-Extracted Propolis on the Accumulation of Cholesterol Induced by High-Cholesterol Diet in the Rat</i>	sangkwon@kangwon.ac.kr	150

APITHERAPY: POSTERS

Hegazi, A.G., Faten, K. and Abd el Hady <i>Egyptian Propolis – Antimicrobial Activity and Chemical Composition of Upper Egypt Propolis</i>	ahmedgaffer@frcu.eun.eg	4
Hegazi, A.G., Farghal, A.A., Faten, K. and Abd El Hady <i>Antiviral Activity and Chemical Composition of European and Egyptian Propolis</i>	ahmedgaffer@frcu.eun.eg	11
Ouyang, L., Liu, L. and Zhau, J. <i>The Investigation for Bee-Queen-Larva Proteins</i>	caiyang@btamail.net.cn	63
Oršolić, N., Horvat, A. and Bašić, I. <i>A Comparison of Antitumor Activity of Propolis and its Related Flavonoids</i>	norsolic@yahoo.com	136
Kwon, M.S., Shin, E.J., Choi, Y.S., Lim, H., Jhoo, W.K., Cheon, M.A., Lee, S.H., Kang, J.S., Kim, S.D. and Kim, H.C. <i>Ethanol-Extracted Propolis Attenuates Kainite-Induced Neurotoxicity via Adenosine A1 Receptor in the Rat</i>	sangkwon@kangwon.ac.kr	151
Lian-Chen, G. and Li-ping, S. <i>Treating Old People Berpes Zoster 30 Cases by Bee Venom Inject</i>	pingping-sun@263.net	153
Li-ping, S. and Lian-Chen, G. <i>Preparation Bee Venom Treating Primary Neuralgia</i>	pingping-sun@263.net	152
Nemtsev, S.V., Zueva, O.U., Khismatoullin, R.G., Khismatoullin, M.R. and Varlamov, V.P. <i>Bees as Potential Source of Chitosan</i>	nina@tentorium.ru	162
Bedascarrasbure, E., Maldonado, L., Alvarez, A. and Rodriguez, E. <i>Content of Flavonoids in the Argentinean Propolis</i>	ebedas@tucbbs.com.ar	194
Krivopalov-Moscvin, I.V., Valiev, Y.I. and Babin, A.A. <i>Apitoxines in Treatment of (Opium) Narcomania (Program "Apitoxe")</i>	api-center@chel.surnet.ru	201
Khismatullin, R.G., Kuzjaev, R.Z., Lyapunov, J.A., Elovikova, E.A. and Khismatullin, M.R. <i>Comparative Assessment of Homogenised Breeding Receiving and Lyophilised Breeding</i>	api@tentorium.ru	260
Ruzankina, T. <i>Honey in the Urgent Therapy or Beekeeping and Apitherapy as one of the Trends in the Ecological Strategy and Tactics of Mankind</i>	iriroud@hotmail.com	288
Hu, F. and Li, Y. <i>Nutritive Value and Pharmacological Actions of Italian Worker Bee Larvae and Pupae</i>	-	294
Ruzankina, T. <i>What Features in Common have Bees and Man (Studies with Children and their Parents)</i>	iriroud@usa.net	317
Stojko, R., Kozłowska-Staniczek, J., Stojko, A., Stojko, J. and Kabała-Dzik, A. <i>Efficiency of Sepol as a Supplement in Cerebral Stroke Based on Computer Tomography and Electroencephalography Screening</i>	rstojko@farmant.slam.katowice.pl	357
Stojko, J., Siwec, A., Stojko, A., Wesoly-Jurczyk, D. and Szaflarska-Stojko, E. <i>Protective Activity of Melisanpol on the Fetus Exposed to the Embryotoxic Compounds</i>	rstojko@farmant.slam.katowice.pl	358
Stojko, A., Pytel, A., Stojko, R. and Romaniuk, D. <i>Efficiency of the Apitherapy Medication: Propol-0 in Burn Wound Treatment</i>	rstojko@farmant.slam.katowice.pl	359
Ulyanich, M. <i>Accumulator Cells of the Prescriptions of Treatment by Products of Beekeeping Applied in Clinical National Medicine of Countries of World (Global) Continent</i>	ulyanich@svitonline.com	391

**SESSION 1:
STANDING COMMISSION FOR BEE BIOLOGY
The Role of Race Characteristics in Beekeeping**

Bienefeld, K.; Reinsch, N. and Thakur, R.K. Institute of Bee Research (Germany) <i>Selection for Uncapping of <u>Varroa</u> Infested Brood Cells in the Honeybee <u>Apis mellifera</u></i>	Kaspar.Bienefeld@rz.hu-berlin.de	137
Wright, P. and Stokes, H. University of Edinburgh (UK) <i>Cognitive Mapping in the Honeybee</i>	P.Wright@ed.ac.uk	361
Stanimirovic, Z.; Pejovic, D. and Stevanovic, J. University of Beograd (Yugoslavia) <i>Hygienic Behavior in Disease Resistance of Two Honeybee Ecogeographic Varieties <u>Apis mellifera carnica</u> from Serbia, Yugoslavia</i>	biolog@vet.bg.ac.yu	171
Gramacho, K.P. and Gonçalves, L.S. FFCLRP-USP (Brazil) <i>The Sequences of the Hygienic Behavior Process of Carniolan Worker Honey Bees <u>Apis mellifera carnica</u></i>	gramacho@usp.br	202
Boot, W.J, Calis, J.N.M. and Allsopp, M. Wageningen Agricultural Univ (Netherlands) <i>Differential Feeding of Larvae Affects Caste Differentiation in <u>Apismellifera capensis</u></i>	Johan.Calis@users.ento.wau.nl	215
Hadisoesilo, S., Shanti, E.N., Kuntadi and Hardi, T. Forest and Nature Conservation Research and Development (Indonesia) <i>Drone Flight Times of <u>Apis cerana</u> and <u>Apis mellifera</u> in the Island of Java</i>	s.hadisoesilo@eudoramail.com	67
De León, S. (Uruguay) <i>Why Cape Bees Work Differently from the Rest?</i>	cecileon@adinet.com.uy	82
De León, S. (Uruguay) <i>Drones</i>	vdeleon@adinet.com.uy	83

**SESSION 11: BEE BIOLOGY
Solitary Bees**

Purwanto, D.P., Fuchs, S. and Koeniger, N. Perum Perhutani Ministry of Forestry and Estate Crops (Indonesia) <i>Investigation of Dorsata Migration on Belitung Island, Indonesia with Wing Venation Analysis</i>	kandaka@yahoo.com	116
Cresti, L., Nepi, M., Maccagnani, B.; Ladurner, E. and Pacini, E. University of Siena (Italy) <i>Pear Pollen Digestion by Larvae of <u>Osmia cornuta</u> Latreille (Hymenoptera megachilidae)</i>	nepim@unisi.it	247
Martins, C.F., Cortopassi-Laurino, M., Koedam, D. and Imperatriz-Fonseca, V.L. Depto De Sistemática & Ecologia-Ccen Universidade Federal Da Paraíba (Brazil) <i>The Use of Trees for Nesting by Stingless Bees in Brazilian Caatinga</i>	mclaurin@usp.br	342
Gemmill, B., Ochieng, A., Nadel, H. and Cunneyworth, P. University of Nairobi (Kenya) <i>Conservation of Wild Pollinators for Better Agricultural Production</i>	barbarag@elci.org	419

SESSION 15: BEE BIOLOGY

General Biology and African Races of Bees

<p>Langowska, A., Szymaś, B. and Rogala, R. awozniak@owl.au.poznan.pl Agricultural University of Poznań (Poland) <i>Laboratory Studies on the Effect of Drones' Presence on the Condition of Honey Bee Workers and their Food Consumption</i></p>	135
<p>Lipiński, Z. lipinski@sprint.com.pl (Poland) <i>Adaptation and Stress – Main Cause of Nest Abandonment by Honeybee Swarms</i></p>	246
<p>Lodesani, M., Spadafora, M., Tommasini, S. and Vecchi, M.A. m.lodesani@stpa.unibo.it Istituto Nazionale di Apicoltura (Italy) <i>Effects of Natural Mating and Instrumental Insemination on some Characteristics of <i>Apis mellifera ligustica</i> Spinola Queens</i></p>	272
<p>Jacobs, F.J., Dauwen, R., Walravens, K. and de Graaf, D.C. frans.jacobs@rug.ac.be University of Ghent Laboratory of Zoophysiology (Belgium) <i>Flowcytometric Analysis of Honey Bee Haemocytes Using Fluorescent Labelled Lectins</i></p>	310
<p>Pflugfelder, J. Pflugfelder@em.uni-frankfurt.de Universität Frankfurt (Germany) <i>How Peaceful are Egyptian Queens? Comparing Aggressive Behaviour of Virgin <i>Apis Mellifera carnica</i> and <i>Apis mellifera lamarckii</i> Queens in a Bioassay</i></p>	374
<p>Amssalu, B., Nuru, A., Radloff, S.E. and Hepburn, H.R. R.Hepburn@ru.ac.za Rhodes University (South Africa) <i>Multivariate Morphometric Analysis of Ethiopian Honeybees</i></p>	418
<p>Wei, S. shiwei@mail1.slu.se University of Agricultural Sciences (Sweden) <i>Microsatellite Investigations of Effective Mating Frequencies in Honey Bees (<i>Apis mellifera</i>) from Different Locations of Kenya</i></p>	177
<p>Ellis, J., Pirk, C.W.W., Hepburn, H.R. and Elzen, P.J. g01E3989@campus.ru.ac.za Rhodes University (South Africa) <i>African Honeybees are Duped into Feeding their Prisoners</i></p>	416
<p>Andere, C., Palacio, M.A., Delgado, P., Figini, E., Rodríguez, E.M., Colombani, M. and Bedascarrabure, E. candere@vet.unicen.edu.ar Universidad Nacional Del Centro (Argentina) <i>Relationship between Defensive and Hygienic Behavior in a Honeybee (<i>Apis mellifera</i> L) Population</i></p>	226
<p>Pirk, C.W.W., Neumann, P. Stueber, S. and Hepburn, R. C.Pirk@ru.ac.za University of Rhodes (South Africa) <i>Egg Laying and Egg Removal by Workers in Queenright Cape Honeybee (<i>Apis mellifera capensis</i> Esch.) Colonies</i></p>	425

SESSION 21: BEE BIOLOGY

The Capensis Phenomenon in South Africa

Hepburn, R.E. and Radloff, S.E. Rhodes University (South Africa) <i>Thelytokous parthenogenesis in Laying Workers of <u>Apis mellifera capensis</u></i>	r.hepburn@ru.ac.za	516
Neumann, P. Martin Luther University (Germany) <i>Behavioural Basis of Social Parasitism of Laying Cape Honeybee Workers (<u>Apis Mellifera capensis</u> Esch)</i>	p.neumann@zoologie.uni-halle.de	376
Lubbe, A. Agricultural Research Council (South Africa) <i>Identifying the Invader Bee, <u>Apis mellifera capensis</u>, in Colonies of <u>Apis mellifera scutellata</u> in the Summer Rainfall Region of South Africa</i>	rietavds@plant2.agric.za	329
Calis, J.N.M.; Boot, W.J. and Allsopp, M. Wageningen Agricultural University (Netherlands) <i><u>Apis mellifera capensis</u> Honey Bee Larvae get Royal Treatment by <u>Apis mellifera scutellata</u> Workers</i>	Johan.Calis@users.ento.wau.nl	211
Erasmus, E., Engelbrecht, T., de Klerk, T., de Klerk, D., Schehle, A. and Meiring, H. Potchefstroom University (South Africa) <i><u>Apis mellifera capensis</u>: A profile by the Commercial Beekeeping Industry on the Effect of this Invasive Parasitic Honeybee in the Summer Rainfall Area</i>	r.moritz@zoologie.uni-halle.de	515
Masemola, R.A. and Kryger, P. ARC - Plant Protection Research Institute (South Africa) <i>Morphometric Study of Wings and Hamuli as Parameters to Discriminate <u>Apis mellifera capensis</u> from <u>Apis mellifera scutellata</u></i>	rietam@plant2.agric.za	340
Kryger, P. University of Pretoria (South Africa) <i>The Pseudo-Clone of <u>Apis mellifera capensis</u> - An Obligate Social Parasite in Honeybees</i>	pkryger@zoology.up.ac.za	424
Swart, D. Agricultural Research Council (South Africa) <i>Testing the African Honeybee <u>Apis mellifera scutellata</u>, for Resistance against Invasion by Laying Workers of the Cape Honeybee, <u>Apis mellifera capensis</u></i>	Rietds@plant2.agric.za	507

BEE BIOLOGY: POSTERS

Glinski, Z. and Swoboda-Mazurek, M. <i>The Bumble Bee Immune Responses</i>	gliniski@ursus.ar.lublin.pl	102
Stevanovic, J., Stanimirovic, Z. and Brajkovic, M. <i>Morphometric Variability of Hind Wing Parameters of Indigenous Honeybee Ecotypes (<u>Apis mellifera carnica</u>) from Serbia</i>	mbrajkov@bf.bio.bg.ac.yu	173
Gramacho, K.P. and Gonçalves, L.S. <i>A Rotatable Comb Section Developed for Filming Honey Bee and Mite Behaviour Inside Capped Brood Cells in Observation Hives</i>	katiagr@ufba.br	203
Manrique, A.J. and Soares, A.E. <i>Selection for Increased Propolis Production and its Effect on Honey Production</i>	manrique@rge.fmrp.usp.br	217

BEE BIOLOGY: POSTERS

<p>Palacio, M.A., Figini, E., Andere, C., del Hoyo, M., Ruffinengo, S., Teruggi, G., Rodriguez, G. and Bedascarrasbure, E. tiruggi@infovia.com.ar <i>Improving Honey Bee Stocks in Argentina</i></p>	227
<p>Andere, C., Palacio, M.A., Rodriguez, E., Dominguez, M.T., Figini, E. and Bedascarrasbure, E. tiruggi@infovia.com.ar <i>Efficacy of a Field and a Laboratory Method to Evaluate <u>Apis mellifera</u> Defensive Behavior in Breeding Programs</i></p>	253
<p>Radakovic, R., Jurekovic, R. and Kezic, J. jkezic@agr.hr <i>Wing Measurement Differences of Different Ecotypes of <u>Apis mellifera carnica</u> in Croatia</i></p>	350
<p>Ali, A.M. adelrushdy@yahoo.com <i>Studies on some Factors Affecting on Wax Comb Construction, Brood, Honey and Wax Production</i></p>	356
<p>Sabatini, A.G. and Lodesani, M. m.lodesani@stpa.unibo.it <i>A Research Project for Apiculture</i></p>	397
<p>Garnery, V., Garnery, L., Meixner, M., Kamel, S. and Sheppard, W. - <i>Genetic Diversity of <u>Apis mellifera lamarckii</u> from the Assiut Region in Egypt</i></p>	417
<p>Ellis, J.D., Neumann, P., Hepburn, H.R. and Elzen, P.J. g01E3989@campus.ru.ac.za <i>Reproductive Success of Small Hive Beetles (<u>Aethina tumida</u> Murray, Coleoptera, Nitidulidae) Reared on Different Diets</i></p>	426

SESSION 5 : BEE PATHOLOGY

Effect of Trade in Bees on the Spread of Pests and Diseases

<p>Elzen, P.J., Baxter, J.R., Neumann, P., Solbrig, A., Pirk, C., Hepburn, H.R. and Westervelt, D. pelzen@weslaco.ars.usda.gov U.S. Dept. Agriculture (USA) <i>Behavior of an African and Western Honey Bee Subspecies Toward the Small Hive Beetle, <u>Aethina tumida</u></i></p>	3
<p>Hood, Wm.M. mhood@clermson.edu Clemson University (USA) <i>Small Hive Beetle, <u>Aethina tumida</u> Control in North America</i></p>	22
<p>Sumner, S. and Mangum, W.A. ssumner@mwc.edu Mary Washington College (USA) <i>A Model of Tracheal Mite <u>Acarapis woodi</u> (Rennie) Infestation of Honey Bees (<u>Apis mellifera</u> L.) Displaying Grooming Behavior</i></p>	47
<p>Devanesan, S. and Jacob, A. devanesan@hotmail.com Kerala Agricultural University (India) <i>Thai Sacbrood Virus Disease of Asian Honeybee <u>Apis cerana indica</u> Fab., in Kerala, India</i></p>	99
<p>Moukminov, M., Ugrumova, V., Ravirov, A. and Ugrumova, O. vlad@vskab.ru All-Russian Scientific & Research Institute (Russia) <i>Development of New Means of Treatment and Prohylyaxis of Stonebrood in Honeybees in Russia</i></p>	175
<p>Kashyap, N.P. and Kumar, A. kashyap@hpkv.hp.nic.in Department of Entomology Himachal Pradesh Agricultural University (India) <i>Distribution and Infestation Phenology of <u>Tropilaelaps clareae</u> and <u>Acarapis woodi</u> in <u>Apis mellifera</u> L. and <u>Apis cerana</u> F. in Northern Hills of India</i></p>	312
<p>Camphor, E.S.W., Hashmi, A.A., Ritter, W. and Bowen, I.D. saint212@hotmail.com National Agricultural Research Centre (Germany) <i>Seasonal Changes in Mite (<u>Tropilaelaps clareae</u>) and Honeybee (<u>Apis mellifera</u>) Populations in Apistan Treated and Untreated Colonies</i></p>	319

SESSION 5 : BEE PATHOLOGY

Effect of Trade in Bees on the Spread of Pests and Diseases

Wang Jiacong, Wu Liming, Chen Lihong, Pen Wenjun and Zhang Guoliang Chinese Academy of Agricultural Sciences (China) <i>The Study on Mechanism of the Resistance to Chalkbrood of Carnica Bees</i> wu-liming@sohu.com	73
Begg, K. and Begg, C. (South Africa) <i>The Conflict Between Beekeepers and Honey Badgers in South Africa: A Western Cape Case Study</i> ratel@iafrica.com	523

SESSION 7 : STANDING COMMISSION ON BEE PATHOLOGY

Diagnosis and Control of Varroa Disease: A New Bee Pest in Africa

Anderson, D.L. CSIRO Entomology <i>Varroa-Bee Relationships -What They Tell us about Controlling Varroa Mites on the European Honey Bee</i> Denis.Anderson@ento.csiro.au	396
Fakhimzadeh, K. University of Helsinki (Finland) <i>Powdered Sugar Dusting for the Control of Varroosis</i> fakhim@LadyBird.helsinki.fi	59
Piccirillo, G.A. and de Jong, D. USP (Brazil) <i>Old Brood Combs are More Infested by the Mite Varroa jacobsoni than New Brood Combs</i> gpicciri@rge.fmrp.usp.br	163
Pejovic, D.; Vucicevic, M. and Stanimirovic, Z. University of Beograd <i>Grooming Behavior in Varroosis Resistance in Two Honeybee Ecogeographic Varieties (Apis mellifera carnica) from Serbia</i> zodex@vet.bg.ac.yu	172
Martin, S.J. and Kryger, P. University of Sheffield (UK) <i>Impact of Varroa destructor on the Honey Bees of South Africa</i> S.J.Martin@sheffield.ac.uk	174
Prandin, L., Dainese, N., Girardi, B., Damolin, O., Piro, R. and Mutinelli, G. Centro Regionale Per L'Apicoltura Ist. Zooprofilattico Sperimentale Delle Venezie (Italy) <i>Varroosis Control: Stability of Homemade Oxalic Acid Water Sugar Solution</i> fmutinelli@izsvenezie.it	266
Guerra, J.C.V., Gonçalves, L.S. and de Jong, D. (Brazil) <i>A Film Study on Behaviors Involved in Attempts to Capture the Mite Varroa jacobsoni in Africanized Honey Bee Brood</i> ddjong@fmrp.usp.br	192
Carreck, N.L., Ball, B.V. and Wilson, J.K. IACR (UK) <i>Virus Succession in Honey Bee Colonies Infested with Varroa destructor</i> norman.carreck@bbsrc.ac.uk	273
van Veen, J.W., Arce, H.G., Fallas, R-A. C. and Ramírez-Arias, F. Utrecht University (Netherlands) <i>A New Brood Disease Affecting Honeybees in Costa Rica</i> jvanveen@una.ac.cr	412

SESSION 12: BEE PATHOLOGY
Diagnosis and Control of Varroa Disease:
A New Bee Pest in Africa

Allsopp, M. ARC-Plant Protection Research Institute (South Africa) <i>Varroa in Africa – A Serious Threat</i>	Vredma@plant3.agric.za	339
Poklukar, J. Agricultural Institute of Slovenia (Slovenia) <i>The Number of <u>Varroa</u> Mite Fall Estimated in Spring in Relation to the Consecutive Economical Important Traits of Bees</i>	janez.poklukar@kis-h2.si	132
Trouiller, J. and Watkins, M. VITA (Europe) Limited <i>Experimentation on Apiguard - A Controlled Release Gel of Thymol Against Honeybee Diseases</i>	max.watkins@vita-europe.com	380
Schmidt-Bailey, J. University of Illinois (USA) <i>Successful Implementation of Integrated Pest Management for <u>Varroa</u> Control (From Humble Beginnings to Patented Devices)</i>	JBeeApiary@aol.com	111
Murilhas, A.M. Univ. de Évora (Portugal) <i>Impact of <u>Varroa Destructor</u> N. Sp. Infestation on Honey Production of <u>Apis mellifera</u> L. Colonies in a Mediterranean Climate</i>	antoniomurilhas@mail.telepac.pt	168
Gardi, T., Bernardini, M. and Gonnelli, F. University of Perugia <i>Control of <u>Varroa jacobsoni</u> Oud. by Removing the Drone Brood or Confining Queen in <u>Apis Mellifera ligustica</u> Colonies</i>	gardidapp@tiscalinet.it	262
Huang, Z.Y. Michigan State University (USA) <i>Mitezapper: A New Device for <u>Varroa</u> Mite Control</i>	bees@msu.edu	349
Koeniger, N. and Heine, J. <i>Coumaphos bee strips ([®]CheckMite+) for <u>Varroa</u> Control in honeybees</i>	-	431

SESSION 25: BEE PATHOLOGY
American Foulbrood: Early Detection and Control

Hansen, H. and Brødsgaard, C.J. Danish Institute of Agricultural Sciences (Denmark) <i>World-Wide Distribution, Early Detection and Control of American Foulbrood</i>	henrik.hansen@agrsci.dk	370
Fries, I.; Wei, S.; Coleman, C.J. and Raina, S. Swedish University of Agricultural Sciences (Sweden) <i>Is American Foulbrood (<u>Paenibacillus larvae larvae</u>) Absent in Honey Bee Colonies in Sub-Saharan Africa?</i>	ingemar.fries@entom.slu.se	124
Ho, K-K. and Chen, Y-W. National Taiwan University (Taiwan) <i>Susceptibility of the Asian Honey Bee (<u>Apis cerana</u>) to American Foulbrood (<u>Paenibacillus larvae larvae</u>)</i>	kkho@ccms.ntu.edu.tw	371
de Graaf, D.C., Dobbelaere, W., Peeters, J.E. and Jacobs, F.J. Veterinary and Agrochemical Research Centre (Belgium) <i>Use of the 16SrRNA Gene-Based PCR for Identification of <u>Paenibacillus larvae</u> subsp. Larvae in Diseased Larvae and Honey</i>	Dirk.de.Graaf@var.fgov.be	309
Ritter, W., Dobbelaere, W. Brodsgaard, C.J. and Hansen, H. (Denmark) <i>Detection and Infectiousness of P.I. Larvae Spores in Wax</i>	Dr.Wolfgang.Ritter@t-online.de	514

SESSION 25: BEE PATHOLOGY

American Foulbrood: Early Detection and Control

Fries, I. and Nordström, S. Swedish University of Agricultural Sciences (Sweden) <i>Examination of Honey and Adult Bees for Early Detection of <u>Paenibacillus larvae larvae</u></i>	ingemar.fries@entom.slu.se	368
Brødsgaard, C.J. and Hansen, H. Danish Institute of Agricultural Sciences (Denmark) <i>Testing of Tolerance against AFB in Honey Bee Larvae and Colonies</i>	camilla.brodsgaard@agrsci.dk	133
Palacio, M.A. and Bedascarrasbure, E.L. Unidad Integrada INTA-Facultad de Ciencias Agrarias (Argentina) <i>Honey Bee Hygienic Behavior and its Relation to Brood Diseases</i>	palacio@vet.unicen.edu.ar	372
Crailsheim, K., Riessberger-Gallé, U. and Wedenig, M. Universität in Graz (Austria) <i>Substances Inhibiting Growth of <u>Paenibacillus larvae larvae</u> in Honey Bee Colonies</i>	karl.crailsheim@kfunigraz.ac.at	375
Gregorc, A. and Bowen, I.D. University of Ljubljana (Slovenia) <i>Comparative Effects of <u>Paenibacillus larvae</u> and OTC on Honey Bee Larvae</i>	gregoral@mail.vf.uni-lj.si	369

BEE PATHOLOGY: POSTERS

Benham, D. <i>Protecting Honeybee Colonies in Iraq in Chilled Potatoes Store in Summer</i>	christine.karakyriakou@wfp.org	6
Shahrouzi, R. <i>Two Decades of Living with <u>Varroa</u> in Iran</i>	-	9
Abd Al-Fattah, M.A. <i>Effect of Immature Queen Honeybees on the Construction of Queen Cells in Queenless Colonies</i>	esru@thewayout.net	14
Glinski, Z., Kauko, L. and Swoboda-Mazurek, M. <i>Ecological Control of Chalkbrood of the Honey Bee, <u>Apis Mellifera L.</u></i>	glinski@ursus.ar.lublin.pl	101
Fakhimzadeh, K. <i>The Finnish Device Detects <u>Varroa</u> from Adult Bees</i>	Kamran.Fakhimzadeh@Helsinki.fi	110
Nordstrom, S. and Forsgren, E. <i>Acute Paralysis Virus: Course of Infection</i>	Eva.Forsgren@entom.slu.se	155
Jung, J.K., Lee, M.Y. and Mah, Y.II. <i>Infestation of <u>Varroa jacobsoni</u> and <u>Tropilaelaps clareae</u> in Some Apiaries, 1999-2000 in South Korea</i>	jungjk@rda.go.kr	160
Bahreini, R., Tahmasebi, Gh., Nowzari, J. and Talebi, M. <i>The Comparison Efficacy of Fluvalinate and Formic Acid 65% Against Honey Bee Parasitic Mite <u>Varroa jacobsoni</u> Oud</i>	ahri@abdnet.com	178
Viet Lien, P., Cong Hoat, P., Thi Lan, N. and Thi Coi, V. <i>Situation of Sac-Brood Disease Infection on <u>Apis cerana</u> Beehives in some Northern Provinces of Vietnam</i>	vhh@fpt.vn	204
del Hoyo, M., Palacio, M.A., Ruffinengo, S., Bedascarrasbure, E.L. and Basualdo, M. <i>Beevar: An Organic Product for <u>Varroa</u> Control</i>	mdelhoyo@vet.unicen.edu.ar	221
del Hoyo, M., Torres, J., van der Horst, A., Basualdo, M. and Libonatti, C. <i>Organic Products Incorporated in Wax Foundation for <u>Varroa</u> Control</i>	mdelhoyo@vet.unicen.edu.ar	222
Ruffinengo, S., Eguaras, M., Bailac, P., Torres, J., Basualdo, M. and Ponzi, M. <i>Essential Oils in the Control of <u>Varroa destructor</u>: An Evaluation in Laboratory Conditions</i>	ruffinen@mdp.edu.ar	223

BEE PATHOLOGY: POSTERS

del Hoyo, M., Goncalves, L., Palacio, A. and Bedascarrasbure, E.L. mdelhoyo@vet.unicen.edu.ar <i>Influence of Climate on Varroa destructor Reproduction</i>	224
del Hoyo, M., Goncalves, L., Palacio, A. and Bedascarrasbure, E.L. mdelhoyo@vet.unicen.edu.ar <i>Apis mellifera Hygienic Behaviours in Relation to Varroa destructor Tolerance in Two Honey Bee Populations in Argentina</i>	225
Palacio, M.A., Flores, J.M., Figini, E., Ruffinengo, S., Escande, A., Bedascarrasbure, E., Rodriguez, E. and Goncalves L. tiruggi@infovia.com.ar <i>A Comparative Study of Uncapping and Removing Dead Brood in Hygienic and Non-Hygienic Honeybees</i>	228
del Hoyo, M., Vidondo, P., Eguaras, M. and Bedascarrasbure, E.L. mdelhoyo@vet.unicen.edu.ar <i>A New Product with Oxalic Acid (Oxavar[®]) for the Control of Varroa destructor</i>	230
del Hoyo, M., Vidondo, P., Eguaras, M. and Bedascarrasbure, E.L. palacio@server2.vet.unicen.edu.ar <i>The Therapeutic Efficacy of a New Formulation (Oxavar[®]) for the Treatment of Varroasis in Honeybees</i>	231
Dulce, M.T. Schuch, L.G., Tochetto and Bavaresco, A.R. lara-rs@agricultura.gov.br <i>Interference of Aspergillus Spp and other Mold Spores in the Presumptive Diagnosis of AFB by the Hanging Drop Technique in Materials from Honeycombs</i>	235
Terzolo, H., Torres, J., Cordeviola, J., Combessies, G. and Palacio, M.A. tiruggi@infovia.com.ar <i>Using Direct Immunofluorescence Technique with Egg Yolk Immunoglobulins (IGY)</i>	251
Astolfi, M. silarta@tin.it <i>Observations about the Fly Senotainia tricuspis</i>	259
Hunter-Fujita, G.R., Mossadegh, M.S., Taylor, S.C., Lawson, P.A. and Ball, B.V. rfujita@onetel.net.uk <i>Microbiological Investigation of the Dwarf Honey Bee Apis floreae</i>	274
Petkov, R. and Basheva, S. - <i>A Method for Identification of Non-Specific Inhibiting Zones in Testing Bee Honey for Antibiotic Residuals</i>	280
Hansen, C.V., Lassen, K., Vejsnaes, F. and Jørgensen, A.S. asj@biavl.dk <i>The Danish Strategy for Varroa Control</i>	301
Kumar, A. and Kashyap, N.P. <i>Population Dynamics and Control of Tropilaelaps clareae delfinado and Baker in Colonies of Apis mellifera L</i>	311
Floris, I., Satta, A., Delrio, G. and Cabras P. ifloris@ssmain.uniss.it <i>Effectiveness and Persistence of Amitraz in Plastic Strips in the Apiary Control of Varroa Jacobsoni Oud</i>	313
Chmielewski, W. wit.chmielewski@man.pulawy.pl <i>Results of Arcaro-Entomological Analyses of Fresh Pollen Pellets</i>	315
Joubert, J.J., de Rycke, P.H., Dobbelaere, W., de Graaf, D.C., Hosseinian, H. and Jacobs, F.J. frans.jacobs@rug.ac.be <i>The Possible Role of Varroa destructor in the Transmission of Paenibacillus larvae larvae Spores</i>	347
Aydin, L., Gulegen, E. and Cetinbas, H. laydin@uludag.edu.tr <i>Prevalence of Nosema apis in Southern Marmara Region in Turkey</i>	363
Forsyth, M. MarianneF@gpg.gov.za <i>Gauteng Invertebrate Pollinator Conservation Programme</i>	379

BEE PATHOLOGY: POSTERS

Hussein, M.H. <i>Disappearing Disease or Spring Dwindling Syndrome of Honey Bee Colonies in Assiut Governorate, Upper Egypt</i>	mhussin@aun.eun.eg	381
Colombo, M., Spreafico, M. and Eördegh, F.R. <i>Experiences of Control of Varroa destructure Anderson & Truenam, with a New Thymol Formulation</i>	mario.colombo@unimi.it	409
Langella, V. <i>Rotenone Field Trials vs Varroasis in Abruzzo Region</i>	v.langella@izs.it	410
Pham, V.L., Pham, C.H., Nguyen, T.L. and Vu, T.C. <i>Situation of Sacbrood Disease Infection on Apis cerana Beehives in some Northern Provinces of Vietnam</i>	vhh@fpt.vn	428

SESSION 2: BEEKEEPING ECONOMY Difficulties and Successes Since the Africanised Bee

de Jong, D. Chairman <i>Introduction to Session</i>	ddjong@fmrp.usp.br	513
Gonçalves, L.S. University of Sao Paulo (Brazil) <i>Africanised Honey Bee: Introduction, Adaptation and Benefits</i>	lsgoncal@ffclrp.usp.br	401
Ferrera, M.E.T. and de Jong, D. Apis Flora (Brazil) <i>Profitable Apiculture with Africanised Bees in Brazil</i>	apisflora@apisflora.com.br	399
D'Amato, M. (Uruguay) <i>A Africanizacion en el Uruguay</i>	karl@ssdnet.com.ar	404
Gramacho, K.P. Universidade Federal da Bahia (Brazil) <i>Disease Resistance in Africanised Honey Bees</i>	katiagr@ufba.br	402
Manrique, A.J. and Piccirillo, G.A. Universidade de São Paulo (Brazil) <i>Impact and Current Situation of the Africanized Bee in Venezuela</i>	manrique@rge.fmrp.usp.br	403
Basualdo, M., Palacio, M.A. and Bedascarrasbure, E.L. UNCPBA (Argentina) <i>Africanised Honeybee Impact in Beekeeping in Argentina</i>	mbasu@vet.unicen.edu.ar	408
de Jong, D. Univeristy of Sao Paulo (Brazil) <i>Technology Transfer - Preparing the Americas for Africanised bees</i>	ddjong@fmrp.usp.br	400

SESSION 17: STANDING COMMISSION ON BEEKEEPING ECONOMY

Local and International Trade in Bee Products

Herro, M.R. (Canada) <i>New Worldwide Market Niches to Increase Honey and Beehive Products Sales</i>	rmherro@yahoo.com	93
Holleman, N. National Honey Board (USA) <i>Health Positioning of Honey as a Marketing Strategy</i>	Nathan@nhb.org	144
Guoda, G., Zhang, C. and Fuliong, H. Zhejiang University (China) <i>Analysis on the Structure of Apiculture Production and Honey Trade in the World</i>	guguoda@sina.com	97
Bedascarrasbure, E., Maldonado, L., Alvarex, A. and Gentile, C. Instituto Nacional de Tecnología Agropecuaria (Argentina) <i>APINET: An Apicultural Network for Latin America</i>	ebedas@tucbbs.com.ar	196
Dinh Quyet Tam Vietnamese Beekeepers Association (Vietnam) <i>Honey Marketing in Vietnam</i>	dinhqtam@hn.vnn.vn	524
Fishpool, K. and Gulliford, R. NSW Agriculture (Australia) <i>Making a Business Plan for a Commercial Apiary</i>	ken.fishpool@agric.nsw.gov.au	20

BEEKEEPING ECONOMY: POSTERS

Asiko, G.A. <i>Technologies and Equipment in Honey Production – Private Sector Participation in Kenya</i>	gtzpes@nbnet.co.ke	54
Fuxing, Z., Lihong, C., Ming, X. and Xiuhong, W. <i>21st Century, China's Apiculture March to its West</i>	china-apiculture@263.net	68
Jinzu, L. and Zhonggao, W. <i>Entering WTO and the Development of China's Apicultural Industry</i>	-	69
Jinzu, L., Zhonggao, W. and Haiyan, L. <i>Industrialised Management in Apiculture</i>	-	71
Bedascarrasbure, E., Basualdo, M., Auza, N., Palacio, M.A., Andere, C. and Dini C. <i>Integrated Plan for Apicultural Training</i>	mdelhoyo@vet.unicen.edu.ar	193
Piñeiro, A.P. <i>Cuban Beekeeping in the New Millenium</i>	eeapi@ceniai.inf.cu	207
Thimann, R. <i>25 Years of the Africanized Honey Bee in Venezuela</i>	apisthim@LatinMail.com	275
Huafu, W. <i>Development of Chinese Native Bees and Introduced Bees</i>	-	283
Chmielewski, W. <i>Honey Bees as Pollinators – A Topic of Postage Stamp Collections</i>	wit.chmielewski@man.pulawy.pl	314
Rubio, J.L. <i>Communication for the Farmer Development</i>	lorenzat@satlink.com	328
Grgic, Z., Franic, R., Kezic, N. and Knaus, K. <i>Economic Preconditions for Beekeeping Development in Croatia</i>	nkezic@agr.hr	360

SESSION 4: STANDING COMMISSION FOR BEEKEEPING FOR RURAL DEVELOPMENT Beekeeping Against Poverty

Hertz, O. Bee Consultant (Denmark) <i>Beekeeping Against Poverty</i>	o_hertz@post12.tele.dk	52
Ogaba, M.R. and Akongo, T. Kitgum Women Beekeeping Association (Uganda) <i>Gender Issues in Beekeeping: The Uganda Case</i>	primetlc@yahoo.co.uk	49
Abdullah, A., Pengembangan, Y. and Mandiri, U. Forest-Dependent Community Development Through <i>Apis cerana</i> Bee Keeping Program	rahman@aseansec.org	78
Maane, J. University of Reading (UK) <i>Development of Beekeeping in Africa –Performance of DBF Supervised Beekeeping Projects in Guinea Bissau, West Africa</i>	j.maane@reading.ac.uk	105
Chandra, W.M. National Beekeeping Center (Indonesia) <i>Beekeeping in Perum Perhutani</i>	dpurwan@gwdg.de	118
Lundall-Magnuson, E.J. and Magnuson, P.C. Plant Protection Research Institute (South Africa) <i>Beekeeping Development as Seen from the Perspective of a Research Organisation</i>	rietem@plant2.agric.za	331
Pal, N. and Thomas, D. Central Bee Research and Training Institute (India) <i>Role of KVIC in Beekeeping and Rural Development in India</i>	bkikvic@vsnl.com	302
Cortopassi-Laurino, M., Imperatriz-Fonseca, V.L., Velthuis, H.H.W. and Nogueira-Neto, P. Universidade De Sao Paulo (Brazil) <i>Stingless Bee rearing as an Activity for Sustainable Development</i>	mclaurin@usp.br	343

SESSION 8 : BEEKEEPING FOR RURAL DEVELOPMENT

Achieving Beekeeping Extension

Lea, H. FAO (Italy) <i>Beekeeping Against Poverty : The Work of the FAO</i>	HoZoo.Lea@fao.org	526
Hussein, M.H. University of Assiut (Egypt) <i>Beekeeping in Africa: I- North, East, North-East and West African Countries</i>	mhussin@aun.eun.eg	1
Mangum, W.A. Mary Washington College (USA) <i>The Top-Bar Hive in Commercial Beekeeping and Research</i>	wmangum@mwc.edu	46
Owot, R. Uganda Honey Beekeepers' Association (Uganda) <i>Beekeeping for Rural Development: A Uganda Case</i>	uha@infocom.co.ug	48
Solomon, G. Tobago Apicultural Society (W Indies) <i>The Comparative Advantage of Top Bar Hives and Rectangular Frame Hives for Honey and Beeswax Production in Trinidad and Tobago</i>	caribees@yahoo.com	237
Banne, S.M., Lundall-Magnuson, E.J. and Magnuson, P.C. Plant Protection Research Institute (South Africa) <i>Process Followed for the Introduction of Beekeeping into the Rural Areas in South Africa</i>	rietem@plant2.agric.za	330
Chia, K. and Gregory, P. BERUDEP (UK) <i>KOM Beekeeping Project</i>	p.gregory@csl.gov.uk	107
Imperatriz-Fonseca, V.L. and Cortopassi-Laurino, M. Universidade De Sao Paulo Depto De Ecologia (Brazil) <i>Stingless Bees Rearing in Brazil</i>	vlifonse@usp.br	341
Ansumana, A. (Kenya) <i>Comparison Between the Mud Top Bar Hive with Kenyan Top Bar Hive in Terms of Installation, Management and Honey and Beeswax Productivity</i>	mud_hive@hotmail.com	8

SESSION 16 : BEEKEEPING FOR RURAL DEVELOPMENT

Beekeeping Development in Africa

Otengo, P.U. <i>Beekeeping Against Poverty: Achieving Beekeeping Extension</i>		115
Bangsi, F. and Njong, A.M. <i>Beekeeping Extension and Technology Transfer as Sustainable Livelihood Strategy</i>	fbangsi@yahoo.fr	429
Behnam, D. (Iraq)		7
Mwakatobe, A.R. Tanzania Wildlife Research Centre (TAWIRI) (Tanzania) <i>Participation of Women and the Youth on Beekeeping Activities in Arumeru Homegardens, Arumeru District, Arusha –Tanzania</i>	a_mwakatobe_99@yahoo.com	104
Obster, T. Zambia Forestry College (Zambia) <i>The Potential of Beekeeping in Poverty Alleviation and Reduction of Deforestation in Peri-Urban Areas of the Copperbelt Province of Zambia</i>	-	114
Hassan, L.M. Njiro Wildlife Research Centre (Tanzania) <i>Development and Promotion of Simple Tested Methods of Beekeeping: A Practical Strategy for Conservation and Poverty Alleviation</i>	tawiri@africaonline.co.tz	140

SESSION 16 : BEEKEEPING FOR RURAL DEVELOPMENT

Beekeeping Development in Africa

Karunde, H.A. Njiro Wildlife Research Centre (Tanzania) <i>The Role of Small Scale Women Beekeeping Enterprises in Poverty Alleviation: An Alternative Route to Development</i>	tawiri@africaonline.co.tz	141
Mbae, R. Ministry of Agriculture and Rural Development <i>The Steam Wax Extractor</i>	sdlp@skyweb.co.ke	165
Mlingwa, C. Njiro Wildlife Research Centre (Tanzania) <i>The Role of Beekeeping in Conservation of Protected Areas of Tanzania: A Way Out of Poverty</i>	tawiri@africaonline.co.tz	183
Zaria, I.A. Biye Beekeepers Society (Nigeria) <i>Improving the Traditional Bee Farmers Practices Using Apitherapy as an Extension Approach (A Case Study of Zaria area of Kaduna State in Nigeria)</i>	-	293
Kihwele, D.V.N, Chiguru, S.K. and Naasi, E.M. Ministry of Natural Resources and Tourism (Tanzania) <i>Indigenous Knowledge about Beekeeping and some Successful Stories of Beekeeping in Tanzania</i>	forestry@africaonline.co.tz	326
Gani, M.O. Bangladesh Forest Department (Bangladesh) <i>The Giant Honey Bee (Apis dorsata) and Honey Hunting in Bangladesh Sundarbans</i>	cfkhulna@bttb.net.bd	335
Canyike, C. Dept. of Entomology <i>Nakasongola District Administration Production Department Beekeeping for Rural Development</i>	-	338

BEEKEEPING FOR RURAL DEVELOPMENT: POSTERS

Hussein, M.H. <i>Beekeeping in Africa: II – Central, Southern African Countries and Islands</i>	mhussin@aun.eun.eg	2
Mwakatobe, A.R. <i>The Importance of Melliferous Plants on Beekeeping Activities in Arumeru Homegardens, Arusha, Tanzania</i>	tawiri@africaonline.co.tz	103
Gregory, P. <i>Consideration of Technical and Social Factors Affecting Beekeeping in Rural Development in Order to Identify Areas which may Improve Extension Dissemination</i>	p.gregory@csl.gov.uk	106
Gichora, M., Wittmann, D. and Odulaja, A. <i>Beekeeping in Baringo District, Kenya: Which way Forward for Research and Extension?</i>	mewagi@hotmail.com	112
Petersen, S.F. <i>Preliminary Beekeeping Survey of Cambodia for Possible Development of Beekeeping Industry</i>	-	297
Petersen, S.F. <i>Interaction Between Bees and Man in Northwestern Lao</i>	-	298
Petersen, S.F. and Saville, N. <i>A Multi-Step Programme for Beekeeping Development</i>	-	299
Sivaram, V. <i>Honey-Flora and Beekeeping in Karnataka State, India</i>	sivaram900@yahoo.co.uk	383

SESSION 3: BEEKEEPING TECHNOLOGY AND EQUIPMENT Honey Quality

González, M., Popolizio, E.R. and Guzmán, B. National University of Tucumán (Argentina) <i>Phenolic Compound in Honeybee</i>	epopo@manant.unt.edu.ar	113
Mouteira, M.C., Malacalza, N.H., Lupano, C.E. and Baldi, B.M. Ministerio de Agricultura (Argentina) <i>Analysis of Honey Produced in the Province of Buenos Aires, Argentine, from 1997 to 2000</i>	mcanon@isis.unlp.edu.ar	184
Mutinelli, F., Baggio, A. and Piro, R. Centro Regionale Per L'Apicoltura Ist. Zooprofilattico Sperimentale Delle Venezie (Italy) <i>Varroa Control and European Legislation Governing the Use of Veterinary Medicinal Products</i>	fmutinelli@izsvenezie.it	267

SESSION 10: STANDING COMMISSION ON BEEKEEPING TECHNOLOGY AND EQUIPMENT Appropriate Technology for Professionals and Enthusiasts

White, B. New South Wales Agriculture (Australia) <i>Impacts of the Most Significant Honeybee Research in Australia on the Beekeeping Industry</i>	bruce.white@agric.nsw.gov.au	208
Hlungwani, M. Budirirai Secondary School (Zimbabwe) <i>Bees are Useful Insects but can be Dangerous if not well Handled</i>	mcsquare@mweb.co.zw	365
de Jager, A.J., Taylor, G.J., Greeff, P. and Lishman, A.W. P.E. Technikon (South Africa) <i>The Effect of Commercial Propolis Production on Hive Profitability</i>	andredj@petech.ac.za	166
Peyvel, C. (France) <i>Experience and Use of Package Bees Imported from Overseas Countries</i>	cpeyvel@voila.fr	100
Ollaik, R. American University of Beirut (Lebanon) <i>Local Bee Race Replacements in Lebanon: Technical and Economic Feasibilities</i>	ramiollaik@hotmail.com	197
Stalidzans, E., Bilinskis, V. and Berzonis, A. Riga Technical University (Latvia) <i>Determination of Development Periods of Honeybee Colony by Temperature in Hive in Latvia, Year 2000</i>	egils@kafeko.lv	378
Thomas, D., Pal, N. and Subba Rao, K. Central Bee Research and Training Institute (India) <i>Bee Management and Productivity of Indian Honey Bees</i>	pun4@ddsl.net	304

SESSION 13: BEEKEEPING TECHNOLOGY AND EQUIPMENT

The Application of Pheromones

Crewe, R.M. and Moritz, R.F.A. University of Pretoria (South Africa) <i>Analysis of Honeybee Pheromones During Individuals Life Spans</i>	robin.crewe@bioagric.up.ac.za	508
Wossler, T.C., Crewe, R.M., Martin, S. and Beekman, M. University of Pretoria (South Africa) <i>Pheromone Deceit by Delinquent Honeybee Workers Leads to Reproductive Anarchy</i>	tcwossler@zoology.up.ac.za	422
Schmidt, J.O. Carl Hayden Beckes Center (USA) <i>Africanised Bees have been Good for Pheromone Research and Practical Beekeeping</i>	joschmid@u.arizona.edu	510
Reece, S.L., Hepburn, H.R. and Heumann, P. University of Pretoria (South Africa) <i>Mandibular Gland Secretions and Ovarial Development of Drifted Workers</i>	slreece@zoology.up.ac.za	511

SESSION 23: BEEKEEPING TECHNOLOGY AND EQUIPMENT

Cardetti, M.M. National Honey Board (USA) <i>Scientific Health Research as a Platform for a Marketing Strategy</i>	Marcia@nhb.org	143
Thimann, R. and Manrique, A. UNELLEZ (Venezuela) <i>Honey Production with Two Types of Africanized Honey Bees (Hybrids of <u>A.M. scutellata</u>) in Guanare, Venezuela</i>	apisthim@LatinMail.com	276
Petkov, R. and Basheva, S. Central Veterinary Research Institute (Bulgaria) <i>A Comparison of the Methods for Detection of Tetracycline Residuals in Bee Honey</i>	-	281

SESSION 24: BEEKEEPING TECHNOLOGY AND EQUIPMENT

Focus on Queen Production and its Management

White, B. New South Wales Agriculture (Australia) <i>Managing Honeybee Colonies in Flight Cages for the Production of Queen Cells</i>	maree.bingley@agric.nsw.gov.au	209
Jianke, L. Zhengzhou College of Animal Husbandry (China) <i>Correlative Analyses of Brood Ratio and Royal Jelly Production</i>	lijianke@371.net	43
Wei, S., Raina, S.K. and Fries, I. Chinese Academy of Agricultural Sciences (China) <i>Colony Development and Queen Rearing in Kenyan Honey Bees (<u>Apis mellifera scutellata</u>)</i>	shiwei@mail1.slu.se	176
Gardi, T. <i>Genetic Selection of Honeybee Queens in Order to Upgrade Beekeeping Production</i>	gardidapp@tiscalinet.it	398

BEEKEEPING TECHNOLOGY AND EQUIPMENT: POSTERS

Abd Al-Fattah, M.A. <i>Effect of Age and Storage Conditions of Virgin Queens on their Attractiveness and Acceptance by the Honeybee Workers</i>	esru@thewayout.net	15
Popolizio, E.R. <i>Elaboration Mead with Grape Juice of Calchaquies Valley, Argentine</i>	epopo@manant.unt.edu.ar	64
Hadisoesilo, S. <i>Diversity in Traditional Techniques for Enticing <i>Apis dorsata</i> Colonies in Indonesia</i>	s.hadisoesilo@eudoramail.com	66
Bedascarrasbure, E., Maldonado, L. and Alvarez, A. <i>Physical and Chemical Characterization of Argentine Propolis</i>	ebedas@tucbbs.com.ar	195
Jinzu, L. and Zhonggao, W. <i>The Systematic Technique to Produce Beijing Comb-Honey which is a Chinese Patent</i>	zgwu@263.net	205
Jinzu, L. and Zhonggao, W. <i>Systematic Technique to Improve the Production and Quality of Bee Honey and Royal Jelly</i>	zgwu@263.net	206
Libonatti, C., del Hoyo, M., Soracci, A. and Basualdo, M. <i>A Modified Technique for a Better Detection of Oxytetracycline in Honey by High Performance Liquid Chromatography</i>	mdelhoyo@vet.unicen.edu.ar	252
Thimann, R. and Manrique, A. <i>Recollection of Propolis with Africanized Honey Bee Colonies During the Rainy Season in Guanare, Venezuela</i>	apisthim@LatinMail.com	277
Javaheri, S.D. and Mirhadi, S.A. <i>A Comparative Study on the Effect of Artificial and Natural Queen Cells of Honey Bee on Royal Jelly Production</i>	ahri@abdnet.com	321
Kezic, N., Drazic, M., Bubalo, D. and Mustapic, Z. <i>Breeding and Selection of Carniolan Bees (<i>A m carnica</i>) in Croatia</i>	-	351
Dossche, M., Peiren, N. and Jacobs, F.J. <i>Environment Playing a Crucial Role in Venom Production of <i>Apis mellifera</i> Worker Bees</i>	frans.jacobs@rug.ac.be	352
Jacobs, F.J. and Remon, J.P. <i>The Discovery and Practical Use of a Substitute for Beeswax</i>	frans.jacobs@rug.ac.be	353
Hassan, A.R. and Mohamed, A.A. <i>Effect of Comb Foundation Components on their Quality and Utilisation of their Combs by Honeybees</i>	adelrushdy@yahoo.com	354
di Geronimo, J. and Fritz, R. <i>Proline in Argentine Honeys</i>	rfritz@bart.mdp.edu.ar	377
Ulyanich, M. <i>Technology of Beekeeping Migratory Beehouse with Thermal Control and Mechanization of Processes Inside It</i>	ulyanich@svitonline.com	389
Ulyanich, M. <i>High Performance Beehive Framework</i>	ulyanich@svitonline.com	390
Ulyanich, M. <i>Historical Beekeeping in Ukraine</i>	ulyanich@svitonline.com	393
Ulyanich, M. <i>Way of Fabrication of Sectional Frameworks of Honeycomb Honey with Usage of a Standard Framework Dadant-Blatt</i>	ulyanich@svitonline.com	394
Marconi, E., Messia, M.C., Panfili, G. and Caboni, M.F. <i>Eurosine: An Appropriate Marker to Assess the Royal Jelly Freshness</i>	marconi@unimol.it	406
Boselli, E., Caboni, M.F. and Sabatini, A.G. <i>Determination and Changes of Free Amino Acids in Royal Jelly During Storage</i>	marconi@unimol.it	407

BEEKEEPING TECHNOLOGY AND EQUIPMENT: POSTERS

Cirone, R. and Cutajar, N. <i>Evidence of Historical Beekeeping Activities in the Central Mediterranean Sea – The Discovery of an Archaeological Site with an Apiary of 3 000 Years Ago</i>	federapi@tin.it	411
Mishin, I. <i>Hygienic Testing of Smoke of Beekeeping Smoker</i>	sshi@sci.smolensk.ru	420
Mishin, I., Makarov J. and Cherjatnikova, T. <i>Control and Rising of Viability and Productivity of a Bee Colony</i>	sshi@sci.smolensk.ru	421

SESSION 9: POLLINATION AND BEE FLORA Bee Forage for Honey Production in Africa

Eardley, C. Agricultural Research Council (South Africa) <i>African Pollinator Initiative</i>	vrehcde@plant5.agric.za	300
Al-Fattah, A. Cairo University (Egypt) <i>The Ecological Behaviour of Honeybee Foragers on Flowers of Certain Aromatic Crops and their Role in Seed Production</i>	nahegazi@link.net	12
Mpuya, M.P. and Mlingwa, C.O.F. Ministry of Natural Resources and Tourism Forestry and Beekeeping Division (Tanzania) <i>A Potential of the Melliferous Plants for Honeybees (Family: Apidae; Trigoninae & Meliponinae) in the Udzungwa Area, Tanzania</i>	-	295
Nuru, A. and Hepburn, H.R. Holetta Bee Research Centre (Ethiopia) <i>Pollen Grains of some Poisonous Bee Plants of Ethiopia</i>	R.Hepburn@ru.ac.za	167
Williams, J. Kannaland Heuning Plaas (South Africa) <i>The Aloe Flowering Season: The Most Interesting Honey-Flow for South African Beekeepers</i>	Kannalandhoney@freemail.absa.co.za	395
Kleyn, D., Prinsloo, H. and Botha, P. Department of Agriculture (South Africa) <i>Revised Regulations on the Classification of Weeds and Invaders: Eucalypts: Addressing the Conflict Between Beekeepers and Conservation of Land Resources</i>	helettep@nda.agric.za	517
D'Albore, G.R. and Antognozzi, E. University of Perugia (Italy) <i>Bee Forage Species in Cameroon: Identification by Pollen Analysis</i>	ricciard@unipg.it	16

SESSION 14: STANDING COMMISSION ON POLLINATION AND FLORA Bee Forage and Genetically Modified Crops

Williams, I.H. IACR (UK) <i>GM Crops, Bee Foraging Behaviour and Gene Flow</i>	ingrid.williams@bbsrc.ac.uk	30
Malone, L.A., Burgess, L.P.J., Philip, B.A., Tregidga, E.L. and Todd, J.H. Horticulture and Food Research Institute of New Zealand (New Zealand) <i>Do GM Crops and their Products Have Side Effects on Bees and Bumblebees?</i>	glinski@ursus.ar.lublin.pl	98
Osborne, J.L., Carreck, N.L. and Williams, I.H. IACR Rothamsted (UK) <i>How Far do Honey Bees Fly to Fields of Brassica Napus (Oilseed Rape)?</i>	juliet.osborne@bbsrc.ac.uk	333

Brødsgaard, H.F., Brødsgaard, C.J., Hansen, H. and Lövei, G.L. Danish Institute of Agricultural Sciences (Denmark) <i>Environmental Risk Assessment of Transgenic Plants Using Honey Bee Larvae</i>	hfb@bigfoot.com	44
--	--	----

SESSION 19: POLLINATION AND BEE FLORA

Pollination of Fruit Crops

Dag, A. and Stern, R. Ministry of Agriculture and Rural Development (Israel) <i>Sequential Introduction and Heavy Density of Beehives Increases Cross-Pollination, Fruit-Set and Yield in Apples</i>	arnondag@volcani.agri.gov.il	386
Eisikowitch, D. and Dag, A. University of Tel-Aviv (Israel) <i>Wild Flowers and Cultivated Plants are Foe or Friends</i>	eisik@post.tau.ac.il	33
Delaplane, K. and Dedej, S. University of Georgia (USA) <i>Pollination of Blueberry (<i>Vaccinium ashei</i>) by Honey Bees (<i>Apis mellifera</i>) and Nectar-Thieving Carpenter Bees (<i>Xylocopa virginica</i>)</i>	ksd@arches.uga.edu	427
Arce Arce, H. National University (Costa Rica) <i>Pollination of Cucurbitaceous Fruit Crops: The Example of Melon Pollination in Central America (<i>Cucumis melo</i>)</i>	henarce@una.ac.cr	387

SESSION 20 : POLLINATION AND BEE FLORA

Modern Seed Production

Bujáki, G. and Horváth, Z. Szent István University Gödöllő (Hungary) <i>Preliminary Results on the Relationship Between Nectar Quality and Bee Visits in Sunflower</i>	bujaki@pmva.hu	270
Masierowska, M. Agricultural University in Lublin (Poland) <i>The Preliminary Studies on a Melliferous Value and Seed Production of Brown Mustard (<i>Brassica Juncea</i> (L.) Czern. Et Coss)</i>	mlm25@agros.ar.lublin.pl	220

POLLINATION AND BEE FLORA: POSTERS

Abd Al-Fattah, M.A. <i>Ecological Study on Inspect Pollination of Broad Bean (<i>Vicia faba</i> L) and Their Effect on Seed Production in Giza Region, Egypt</i>	esru@thewayout.net	13
Roque, O.L.R. and da Cunha, A.P. <i>Melliferous Flora in Barrocal of Algarve (Portugal): Some Important Species with Potential for Introduction to Other Regions of the World</i>	odete@ci.uc.pt	19
Pilipchuk, T.V. and Arkhipov, A.N. <i>Using of Honey Bees (<i>Apis mellifera</i> L) and Bee-Farming Products as Indicator of Environment Radioactive Contamination</i>	chescen@ic-chernobyl.kiev.ua	25
Ivanov, T. and Vachev, P. <i>Investigation of Carbohydrates Composition of Nectar of Some Kinds of <i>Robinia pseudoacacia</i> L by HPLC</i>	tsivanov@anetbg.net	32
Yoneda, M., Shibata, L. and Takaheshi, S. <i>Leaf Collecting Behaviour of Africanized Honeybee</i>	rt2m-ynd@asahi-net.or.jp	34
Coronel, B. and Monti, H. <i>Characterization of <i>Eucalyptus</i> sp Honey of Argentinean Production</i>	bertab@fb.uner.edu.ar	42

POLLINATION AND BEE FLORA: POSTERS

Andrade, P.B., Batista, M.T., Amaral, M.T., Carlos J., Carvalho, M.F., Seabra, R.M. and Proenca da Cunha, A. <i>Determination of Sugar Composition in Portuguese Heather Honey by HPLC/IR</i> tamaral@ci.uc.pt	80
Amaral, M.T., Goncalves, M.J., Ruivo, A.C., Pedrosa, C., Matos, M.A. and Proenca da Cunha, A. <i>Evaluation of Botanical Origin and Physicochemical Attributes in Portuguese Honey from "Serra Da Estrela" Area</i> tamaral@ci.uc.pt	81
Jie, W., Zhang, H-L., Shikui, L. and Pen, W-J. <i>Research on the Important Three Species Woody Honey Plants Nectar Secretion Physiology and Forecast of Northern China</i> apis6022_cn@sina.com	87
Xuan, Z. and Ken, T. <i>Five Nectar Plants in the Tropic Area of Yunnan and Composition of their Nectar</i> eastbee@public.km.yn.cn	96
Lorenzon, M.C., Schoederer, J.H., Sperber, C. and Matrangolo, C.A.R. <i>Co-existence and Resource Partitioning Between Africanized Honey Bees and Stingless Bees (Hym, apidae) in "Caatinga" Vegetation, Brazil</i> lorenzon@ufrj.br	169
Lorenzon, M.C., Conde, M. de MS., Schneider, L., Muniz, R.P., Brito, C.O. and Euler, J.S.N. <i>Occurrence of Native Bees (Hym: apoidea) Affected by Human Actions</i> lorenzon@ufrj.br	170
Malacalza, N.H., Mouteira, M.C., Baldi, B.M. and Lupano, C.E. <i>Characterization of Honey of Different Zones of the Province of Buenos Aires, Argentine</i> cel@quimica.unlp.edu.ar	185
Mladenovi, M., Nedi, N. and Knezevi, S. <i>The Frequency of Honey Bees and other Pollinators in the Pollination of some Apple Varieties</i> nedicn@ptt.yu	212
Wingenroth, M.C. <i>Honey types and Pollen Grains of Asuncion, Lavalle, Mendoza, Argentina, Vegetal Origin and Possible Management of the Beehive Production</i> rmarin@lab.cricyt.edu.ar	218
Marina, B., Bedascarrasbure, E.L., Rodriguez, E.M. and de Jong, D. <i>Body of Africanized and European Honey Bees – Preliminary Report</i> mdelhoyo@vet.unicen.edu.ar	229
Mugnaini, S., Nepi, M. and Pacini, E. <i>Biennial Monitoring of Honeybee Diet</i> pacini@unisi.it	248
Oddo, L.P. and Piro, R. <i>Diagnosis of European Unifloral Honey</i> livia.persano@apicoltura.org	263
Barbattini, R., Gazziola, F., Greatti, M., Grillenzoni, F., Marizza, S. and Sabatini, A.G. <i>Metcalfa Pruinosa (say): Biology and Honey Derived from the Honeydew</i> Renzo.Barbattini@Pldef.Uniud.it	265
Chaudhary, O.P. <i>Milliferous Floral Sources, Its Impact and Future Prospects on Beekeeping in the 'Honey Basket of India'</i> opchaudh@hotmail.com	268
Chaudhary, O.P. <i>Relative Abundance and Diversity of Pollinators in Two Differently Degraded Agro-Systems</i> opchaudh@hotmail.com	269
Fenghe, W. <i>Application of Insect Pollination Technology in Agriculture</i> nkyxys@public.bta.net.cn	285
Vit, P., Medina, M. and Enriquez, E. <i>Meliponiculture Species in Guatemala, Mexico and Venezuela</i> vitpat@cantv.net	292
Thomas, D. and Kamble, K.D. <i>Bee Flora and Migratory Routes in India</i> cbrti@yahoo.com	305
Pane, R., Utami, A. and Rahayu, B. <i>The Application of Bee Keeping by Breeding Activities <i>Apis cerana</i> Wild in Bima Regency, NTB Province, Indonesia</i> busy@planbee.org.uk	320

POLLINATION AND BEE FLORA: POSTERS

Hariprasad, Y. <i>Pesticidal Hazards to Honeybees</i>	hariprasady@yahoo.com	344
Tchuenguem Fohouo, F.N., Messi, J., Yakam Mbiako, E., Mbofung, G. and Hentchoya Hemo, J. <i>Exploitation des fleurs de Voacanga Africana Staph (Apocynaceae) par Apis mellifera L (Hymenoptera: Apidae) a Ngoundere (Cameroun, Afrique Centrale)</i>	nformim@yahoo.com	362
Rakhmatov, K.K., Rakhmatova, E.G., Hikmatullin, R.N., Halikov, R. and Shakirov, N. <i>Melliferous Plants of Migratory Beekeeping of Uzbekistan</i>	-	413