## 22<sup>nd</sup> - 26<sup>th</sup> March 2021



# OIST Mini-Symposia & COLOSS ASIA Okinawa

# PROGRAM BOOK

Hosted by the Okinawa Institute of Science and Technology Ecology and Evolution Unit



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# OIST Mini-Symposia 22-24 March 2021



# PROGRAM OIST Mini-Symposia 22-24 March 2021

## $Monday\ 22^{nd}\ March\ 2021$

Live

Invited talks

[Zoom link]

18:30-18:50 JST <b>Live</b>	Opening ceremony (Alexander) Sasha Mikheyev (OIST – Japan / ANU - Australia)
18:50-19:20 JST Live	Honey bee ecotoxicogenomics Amy Paten (CSIRO – Australia)
<u>19:20</u> -19:50 JST	Varroa mite genes interact with its viruses' load

Nurit Eliash (OIST - Japan)

19:50-20:10 JST	Spatial Chat or Break
20:10-20:40 JST Live	A holistic view of global honey bee health Peter Neumann (Institute of Bee Health, University of Bern, Switzerland)
20:40-21:10 JST <b>Live</b>	Would a gene drive work in <i>Varroa destructor</i> ?  Brock Harpur (Purdue University - USA)
21:10-21:30 JST	Spatial Chat or Break
21:30-22:00 JST Live	Varroa – challenges in management  Dennis vanEngelsdorp (University of Maryland - USA)
22:00 JST	CLOSING SESSION

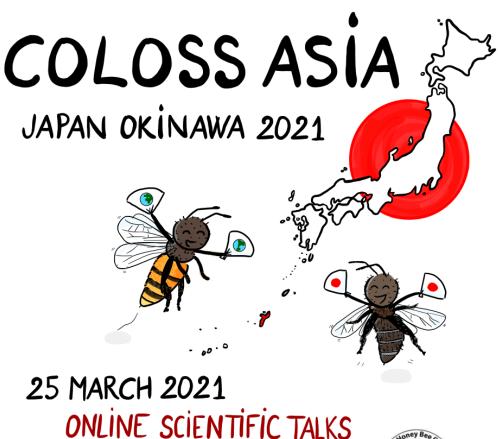
Inv	ite	d t	tall	ks

18:30-19:00 JST Live	Bees facing Varroa and viruses over space and time: a historical study (Alexander) Sasha Mikheyev (OIST – Japan / ANU - Australia)
19:00-19:30 JST	The current status of beekeeping in Japan, focusing on the influence of bee diseases on Japanese beekeeping
Live	Kiyoshi Kimura (NARO - Japan)
19:30-20:00 JST <b>Live</b>	Surveillance and genetic characterization of Varroa mites in Japan Mari Ogihara (NARO - Japan)

20:00-20:20 JST	Spatial Chat or Break
20:20-20:50 JST	An overview of the honeybee genetic diversity and health in the Indian Ocean Islands  Hélène Delatte (CIRAD – Reunion Island / Madagascar)
20:50-21:20 JST	The dynamics of Deformed wing virus genotypes in varroa-infested honey
Live	bee colonies Robert Paxton (Martin Luther University Halle-Wittenberg - Germany)
21:20-21:35 JST Live	BeeBiome Beta Version Resource Benjamin Dainat (Agroscope – Switzerland)

Inv	ite	d t	all	ΚS

18:30-19:00 JST Live	Virus silencing in honey bees and their mites Emily Remnant (University of Sydney - Australia)
19:00-19:30 JST	New method of injecting solution into the abdomen to overcome fixation delay of the midgut on making the histological specimens of honeybee worker
Live	Tetsuro Inamoto (Kyoto Prefecture Livestock Division - Japan)
19:30-20:00 JST Live	The gut microbiota affects the social network of honey bees Philipp Engel (University of Lausanne - Switzerland)
20:00-20:20 JST	Spatial Chat or Break
20:20-20:50 JST	When East meets West: The prevalence of pathogens and parasites in honey bees
Recorded	Panuwan Chantawannakul (Chiang Mai University - Thailand)
20:50-21:30 JST	GENERAL DISCUSSION I



26 MARCH 2021

BEEKEEPERS SEMINAR

# PROGRAM COLOSS Asia Okinawa 25-26 March 2021

## Thursday 25th March 2021

## Morning session (Scientific talks)

09:40-10:00 JST Live	Opening session COLOSS Asia Okinawa committee members
10:00-10:30 JST Live	COLOSS and activities Peter Neumann (President of COLOSS)
10:30-10:50 JST	Perspective of genome editing aiming at building the better strains of the honey bee Apis mellifera  Masatsugu Hatakeyama (NARO - Japan)
10:50-11:10 JST Live	What have we learnt studying Varroa destructor in Asia? Huoqing Zheng (Zhejiang University - China)
11:10-11:30 JST	The untold story of Varroa mite successful invasion unravelled by worldwide population genomics  Maeva Techer (OIST - Japan)
11:30-11:50 JST	Establishment of a simple method for ex vivo honey bee cell culture capable of gene expression analysis
Recorded	Kazuyo Watanabe (NARO - Japan)
11:50-12:10 JST: Live	Application of thiamethoxam in mustard adversely affects honey bee colonies Amit Choudhary (Punjab Agricultural University - India)

#### Afternoon sessions (Scientific talks)

#BREAKOUT ROOM	1
14:00-14:20 JST	Ecological treatment of Varroosis: Brood interruption techniques and application of oxalic acid
Recorded	Frías-Álvarez Ariadna (Spain)
14:20-14:40 JST	Study of the main causes of mortality of honey bee colonies <i>Apis mellifera</i> intermissa in Algeria
Live	Noureddine Adjlane (Mhamed Bougara University - Algeria)
14:40-15:00 JST Recorded	Removal of veterinary treatments and other residues from beeswax Alba Luna (INIA - Spain)
15:00-15:20 JST	Toxicity Effect of Five Essential Oils and their Components Derived from Cymbopogon citratus, Eucalyptus globulus, Rosmarinus officinalis, Thymus schimperi, Trachyspermum ammi against Varroa destructor in Laboratory Tests
Recorded	Chuleui Jung (Andong National University – Korea)

15:20-15:40 JST:	Spatial Chat or Break
15:40-16:00 JST Recorded	Beekeeping industry in Iran: Current status and future directions Alireza Arab (University of Tehran - Iran)
16:00-16:20 JST	THERE AND BACK AGAIN – Deciphering the host specificity of <i>Varroa</i> spp. with population genetics
Live	Alexis Beaurepaire (University of Bern, Switzerland)
16:20-16:40 JST Live	Beekeeping in the meeting point of continents: From Asia to Europe Aslı Özkırım (Hacettepe University - Turkey)
16:40-17:00 JST Recorded	Polymorphism of COI gene in honey bees from different regions of Ukraine Roman A. Volkov (Yuriy Fedkovych Chernivtsi National University - Ukraine)

#### Afternoon sessions (Scientific talks)

#BREAKOUT ROOI	M 2
14:00-14:20 JST  Live	Observation of monthly metabolic changes in honey bee workers using <sup>1</sup> H NMR Saetbyeol Lee (Czech University of Life Sciences Prague - Czech Republic)
14:20-14:40 JST  Recorded	Combined effects of temperature and nutritional stress on TBARS level in Apis mellifera Liudmyla Yazlovytska (Yuriy Fedkovych Chernivtsi National University, Ukraine)
14:40-15:00 JST  Recorded	The INSIGNIA project: a citizen science protocol for honeybee colony as biosampler for pesticides  Jozef van der Steen (Alveus AB Consultancy - The Netherlands)
15:00-15:20 JST Live	Do novel insecticides and viral pathogens interact to harm honey bees?  Yahya Al Naggar (Martin Luther University Halle-Wittenberg – Germany)
15:20-15:40 JST:	Spatial Chat or Break
15:40-16:00 JST	Determination of some heavy metals and elements in honeybee and honey
Recorded	samples from Saudi Arabia Dalal M. Aljedani (University of Jeddah - Saudi Arabia)
Recorded  16:00-16:20 JST  Recorded	•
16:00-16:20 JST	Dalal M. Aljedani (University of Jeddah - Saudi Arabia)  Bridging bee research and Asian beekeeping practice: how do beekeepers gain knowledge about good beekeeping practices?  Lotta Fabricius Kristiansen & Linde Morawetz (Swedish University of

## Morning session (Scientific talks)

09:50-10:00 JST <u>Live</u>	Opening session COLOSS Asia Okinawa committee members
10:00-10:20 JST	Dynamics of Temporal Transcriptomic and Epigenomic in Response to Lethal Viral Infection Hongmei Li-Byarlay (Agricultural research and development program, Central State University, Wilberfoce Ohio, USA)
10:20-10:40 JST	Draft genome sequences of the Japanese honey bee, <i>Apis cerana japonica</i> and comparative genomic analysis for honey bee health <b>Kakeru Yokoi (NARO - Japan)</b>
10:40-11:00 JST Live	A potential probiotic, Leuconostoc sp. TBE-8 for honey bee, Apis mellifera Ming-Cheng Wu (National Chung Hsing University - Taiwan)
11:00-11:20 JST:	Spatial Chat or Break
11:20-11:40 JST	Evaluation of hygienic behaviour of <i>Apis mellifera</i> Linnaeus colonies by pinkilled brood method
	Bharathi Mohindru (Punjab Agricultural University - India)
11:40-12:00 JST	Formulated Neonicotinoid Insecticides influence the Sugar Responsiveness and Orientation Behavior of Honey Bees ( <i>Apis Mellifera</i> ) Under Laboratory Condition  Muhammad Shoaib Saleem (University of Karachi - Pakistan)

## Afternoon Beekeeper Seminar (Japanese/English)

Language spoken -> Language translated [Zoom link]

13:30-13:45 JST  Recorded EN -> JP	Bridging bee research and Asian beekeeping practice: how do beekeepers gain knowledge about good beekeeping practices?  Lotta Fabricius Kristiansen & Linde Morawetz (Swedish University of Agricultural Sciences - Sweden)
13:45-14:00 JST  Recorded EN -> JP	Honey Bee Watch: Using Citizen Science for the First Global Monitoring of Free-Living Colonies of all <i>Apis</i> Species Raffaele Dall'Olio (BeeSources – Beekeeping Consultancy - Italy) & Steve Rogenstein (The Ambeessadors)
14:00-14:30 JST <u>Live JP -&gt; EN</u>	日本の養蜂場におけるミツバチヘギイタダニの浸潤状況及びその特性解析 Mari Ogihara 荻原 麻理 (NARO – Japan)

14:30-14:50 JST:	Break
14:50-15:20 JST  Live JP -> EN	An example of SDGs honey bee research bridging with local community: Honey and Coral Project Kirino Ryo 桐野龍 (Onna Village Public Office – Okinawa 恩納村役場)
15:20-15:30 JST Live EN -> JP	Honey and Coral Project: past activities and future perspectives  Vienna Kowallik (OIST – Japan)
15:30-15:50 JST  Live EN -> JP	What genome sequencing has taught us on beekeeping pests spread and evolution? A perspective on the Varroa mite problem マエヴァテシェル Maeva Techer (OIST – Japan)
15:50-16:10 JST	Beekeeping and management in tropical island: the example of Reunion Island in Indian Ocean
Recorded EN	オリヴィエ・エスノー Olivier Esnault (衛生防御グループ GDS – Reunion Island, France)
16:10-17:00 JST	Open questions and discussion among beekeepers and researchers

#### Code of Conduct

- By participating in the OIST Mini-symposia (22<sup>nd</sup> to 24<sup>th</sup> March 2021) and COLOSS Asia Okinawa (25<sup>th</sup> to 26<sup>th</sup> March 2021), you agree to abide to this code of conduct
- If you do not agree or do not meet expected, collaborative, respectful behavior, your participation will be immediately revoked on all virtual platforms. In addition, your misconduct can be reported for future related conferences participation.

#### Expected behavior

- Similarly, to any regular in-person meeting, you are required to treat everyone with respect, regardless of race, age, culture, ability, ethnicity or nationality, gender identity and expression, sexual orientation, marital status, religious affiliation, and socioeconomics status, etc.
- Provide your true professional identity, affiliation, and contact information at the registration and during sessions.
- Turn off your microphone and videos during Zoom session unless you are the speaker or asked to do so (to avoid technical issues with the high number of participants)

#### Photos / Recording / Social Media Policy

- Many talks and virtual collaborative exchange will likely include unpublished data; you are required to ask the presenter or fellow participant before sharing with others and on social media.
- Live tweeting of presentations is allowed unless the speaker explicitly opts out by stating so at the start of his/her/their talk. Taking or sharing photos, videos are not permitted unless the presenter stated his/her/their consent be considerate.





#### **Unacceptable Behaviors**

taken from GSA conferences <a href="https://genetics-gsa.org/tagc-2020/conference-code-of-conduct">https://genetics-gsa.org/tagc-2020/conference-code-of-conduct</a> Unacceptable behaviors include, but are not limited to:

- Intimidating, harassing, abusive, discriminatory, derogatory, or demeaning speech or actions by any participant and at all related events
- Harmful or prejudicial verbal or written comments or visual images related to gender, gender expression, gender identity, marital status, sexual orientation, race, religion, political orientation, socioeconomic, disability or ability status, or other personal characteristics, including those protected by law
- Inappropriate use of nudity and/or sexual images (including presentation slides, posters, Slack channels, or Zoom chat)
- Deliberate intimidation or stalking
- Violating the rules and regulations of the online provider, Zoom
- Sustained disruption of scientific sessions or other events
- Unwelcome and uninvited attention or contact
- Real or implied threat of physical harm
- Real or implied threat of professional or financial damage or harm
- Photographing or reproducing slides of oral presentations and posters without permission
- Recording of scientific and other sessions without permission

#### Report

In case of doubt or report need, contact the committee at colossasia2021@gmail.com

Abou Kubaa F Adamchuk L Adjlane N Aglagane A Aguado E Akinbode Foluso C Akinwande H Al Naggar N Aljedani E Amiri E Amoia S Arab A	Rachel Raied Leonora Noureddine Abdessamad Daniel Ologundudu Kayode Yahya Dalal Esmaeil Serena	France Italy Ukraine Algeria Morocco Spain Nigeria Nigeria Germany Saudi Arabia	abbas.rach@gmail.com Raied.aboukubaa@ipsp.cnr.it leonora.adamchuk@gmail.com adjlanenoureddine@hotmail.com abdessamad.agl15@gmail.com daguadol@jccm.es akinbodefoluso@gmail.com akinkay20032001@yahoo.com	Oniris  Researcher at Italian National Center, IPSP-Bari  National University of Life and Environmental Sciences of Ukraine  University of Boumerdes, Department of Agronomy  University Ibn Zohr, Faculty of science Agadir  CIAPA  Department of biology, federal university of technology  Akure	X X X	X X X
Adamchuk L Adjiane N Aglagane A Aguado E Akinbode Foluso C Akinwande H Al Naggar N Aljedani E Amnii E Amoia S Arab A	Leonora  Noureddine Abdessamad Daniel Ologundudu  Kayode Yahya Dalal Esmaeil	Ukraine Algeria Morocco Spain Nigeria Nigeria Germany	leonora.adamchuk@gmail.com adjlanenoureddine@hotmail.com abdessamad.agl15@gmail.com daguadol@jccm.es akinbodefoluso@gmail.com akinkay20032001@yahoo.com	National University of Life and Environmental Sciences of Ukraine University of Boumerdes, Department of Agronomy University Ibn Zohr, Faculty of science Agadir CIAPA Department of biology, federal university of technology	X X	Х
Adjlane N Aglagane A Aguado E Akinbode Foluso ( Akinwande A Al Naggar N Aljedani E Amoia S Arab A	Noureddine Abdessamad Daniel Ologundudu Kayode Yahya Dalal Esmaeil	Algeria Morocco Spain Nigeria Nigeria Germany	adjlanenoureddine@hotmail.com abdessamad.agl15@gmail.com daguadol@jccm.es akinbodefoluso@gmail.com akinkay20032001@yahoo.com	of Ukraine University of Boumerdes, Department of Agronomy University Ibn Zohr, Faculty of science Agadir CIAPA Department of biology, federal university of technology	Х	
Aglagane Aguado [Akinbode Foluso Akinwande Al Naggar Aljedani [Amiri Eamoia Arjun Folia Arjun Folia Aguado Arjun Folia Aguado Arjun Folia Aguado Agua	Abdessamad Daniel Ologundudu Kayode Yahya Dalal Esmaeil	Morocco Spain Nigeria Nigeria Germany	abdessamad.agl15@gmail.com daguadol@jccm.es akinbodefoluso@gmail.com akinkay20032001@yahoo.com	University Ibn Zohr, Faculty of science Agadir CIAPA Department of biology, federal university of technology	Х	Х
Aguado [Akinbode Foluso (Akinwande Hal Naggar Najedani [Amiri Eamoia Arab Arjun F	Daniel Ologundudu Kayode Yahya Dalal Esmaeil	Spain Nigeria Nigeria Germany	daguadol@jccm.es akinbodefoluso@gmail.com akinkay20032001@yahoo.com	CIAPA Department of biology, federal university of technology		
Akinbode Foluso (Akinwande H Al Naggar N Aljedani E Amiri E Amoia S Arab H	Ologundudu Kayode Yahya Dalal Esmaeil	Nigeria Nigeria Germany	akinbodefoluso@gmail.com akinkay20032001@yahoo.com	Department of biology, federal university of technology	X	Х
Akinwande P Al Naggar \ Aljedani [ Amiri E Amoia S Arab P Arjun F	Kayode Yahya Dalal Esmaeil	Nigeria Germany	akinkay20032001@yahoo.com		,,	
Al Naggar N Aljedani E Amiri E Amoia S Arab A	Yahya Dalal Esmaeil	Germany		, www. o	Х	
Al Naggar N Aljedani [ Amiri E Amoia S Arab A	Yahya Dalal Esmaeil	Germany	ushia almagar@asianaa tanta adu as	-	Х	
Amiri E Amoia S Arab A	Esmaeil	Saudi Arabia	yehia.elnagar@science.tanta.edu.eg	Martin Luther University Halle-Wittenberg	Х	Х
Amoia S Arab A Arjun F			dr.daljedani@gmail.com	University of Jeddah	Х	Х
Arab A Arjun F	Serena	U.S.A	e.amiri79@gmail.com	University of North Carolina at Greensboro	Х	
Arjun F		Italy	serena.amoia@ipsp.cnr.it	IPSP-CNR Bari	Х	
	Alireza	Iran	alirezaarab83@gmail.com	University of Tehran	Х	Х
Arora	Rajini	India	rajitox@gmail.com	International Institute of Biotechnology and Toxicology (IIBAT)	Х	Х
	Jigyasa	Japan	jigyasa-arora@oist.jp	OIST	Х	
	Riccardo	Italy	Riccardo.barbera@edu.unito.it	Università degli studi di Torino	X	
	Sara	United Kingdom	smba94@live.com	Bangor University		Х
	Marilina	Argentina	basso@cae.cnea.gov.ar	National Atomic Energy Commission		X
				Facultad de Ciencias Veterinarias, Universidad Nacional	.,	
Basualdo N	Marina	Argentina	mbasu@vet.unicen.edu.ar	del Centro de la Provincia de Buenos Aires	Х	
Beaurepaire A	Alexis	Switzerland	alexis.beaurepaire@vetsuisse.unibe.ch	Institute of Bee Health, University of Bern	Χ	Х
Benedick S	Suzan	Malaysia	suzanben@ums.edu.my	Universiti Malaysia Sabah	Х	Х
Benito Murcia M	Maria	Spain	Mbmurcia@ucm.es	-	Χ	
Bertolotti A	Alicia	France	alicia.bertolotti@anses.fr	ANSES	Х	
Bevk [	Danilo	Slovenia	danilo.bevk@nib.si	National Institute of Biology		Х
Bisrat [	Daniel	Ethiopia	daniel.bisrat@aau.edu.et	Addis Ababa University		Х
Blacquiere 1	Tjeerd	The Netherlands	blacqbee@blacqbee.nl	Retired from Wageningen University		
Bouga M	Maria	Greece	mbouga@aua.gr	Agricultural University of Athens		Х
Boujawdeh N	Nohad	Lebanon	nohadboujawdeh@gmail.com	NBJ Apiculture Consultancies	Х	Х
Braimoh \	Waheed	Nigeria	omokumo1@gmail.com	Kumofarm Nigeria Limited	Х	
Branchiccela E	Belén	Uruguay	belenbranchiccela@gmail.com	Instituto Nacional de Investigación Agropecuaria (INIA)	Х	
Buendía-Abad N	María	Spain	mbuendia92@gmail.com	-	Х	
	Natalia	Argentina	bulacio.natalia@inta.gob.ar	National Institute of Agricultural Technology (INTA)	Х	Х
	Ales	Japan	ales.bucek@oist.jp	Okinawa Institute of Science and Technology Graduate	X	
Cabirol A	Amelie	Switzerland	amelie.cabirol@gmail.com	University University of Lausanne	Х	Х
	Margot	New caledonia	resa@adecal.nc	New Caledonia honey bee health surveillance network	×	
	Eva	Italy	eva.campo.edu@gmail.com	Università degli studi di Torino	X	
•	David	U.S.A	dacarls@gmail.com	USDA/ U. Florida		Х
Castilhos [	Dayson	Brazil	dayson.castilhos@yahoo.com.br	UFERSA - Universidade Federal Rural do SemiÃ;rido	Х	Х
Chantawannakul F		Thailand	panuwan@gmail.com	University of Chiang Mai	Х	Х
	Nadine	Australia	nadine.chapman@sydney.edu.au	University of Sydney	Х	
	Jean-Daniel	Switzerland	jean-daniel.charriere@agroscope.admin.ch		X	
				European Reference Laboratory of honeybee health -		
Chauzat N	Marie-Pierre	France	marie-pierre.chauzat@anses.fr	ANSES	Х	
Cherevatov A	Alexandr	Ukraine	o.cherevatov@chnu.edu.ua	Yuriy Fedkovych Chernivtsi National University		Χ
Choi M	Myeongseok	Korea Republic	seokyda@nate.com	Korea Beekeeping Association	Х	
Choudhary A	Amit	India	amitento@pau.edu	Punjab Agricultural University		Х
Colgan .	Joe	Germany	tcolgan@uni-mainz.de	JGU Mainz		Χ
Costa (	Cristina Amaro	Portugal	amarocosta@esav.ipv.pt	Polytechnic Institute of Viseu	Х	Χ
Dainat E	Benjamin	Switzerland	benjamin.dainat@agroscope.admin.ch	Swiss Bee Research Centre	Х	
Dall'Olio F	Raffaele	Italia	raffaele.dallolio@gmail.com	BeeSources - Beekeeping Consultancy, Council for Agricultural Research and Economics (CREA)	Х	Х
Dalmon A	Anne	France	anne.dalmon@inrae.fr	INRAE - National Research Institute for Agriculture, Food and Environment	Х	Х
Dayıoğlu <b>N</b>	Miray	Turkey	miray.gur@gmail.com	-	Х	
• •	Grecia	Argentina	grecia.degroot@gmail.com	CONICET		Х
	Neville	United Kingdom	n.dearden@sheffield.ac.uk	University of Sheffield		X
	Helene	Reunion, Madagascar	helene.delatte@cirad.fr	CIRAD, Reunion Island	Х	,,
	Lucy	Japan	lucy.dickie1@oist.jp	Okinawa Institute of Science and Technology Graduate	X	
	Gennaro	Italy	gennaro.diprisco@ipsp.cnr.it	University IPSP-CNR Institute for Sustainable Plant Protection -		X
		•		National Research Council of Italy		
	Vincent	Switzerland	vincent.dietemann@agroscope.admin.ch	Swiss Bee Research Centre (Agroscope)	X	X
	Guiling	China	dingguiling@caas.cn	Chinese Academy of Agricultural Sciences (CAAS)	X	X
	Tobias	Germany	t.dittmann@tskmv.de	Tierseuchenkasse Mecklenburg Vorpommern	Х	Х
	Greg	Australia	Greg.Dojchinov@csiro.au	Research Projects	Х	
Dora Veronika F	Rusznak	Hungary	dora.rusznak@mfa.gov.hu	Agricultural affairs, Embassy of Hungary	X	

Last Name	First Name	Country	Email	Institute	OIST Mini- Symposia	COLOSS ASIA Okinawa
Du Rand	Ezette	South Africa	ezette.durand@up.ac.za	University of Pretoria	Х	Х
Duquesne	Veronique	France	veronique.duquesne@anses.fr	ANSES	Х	
El-Obeid	Dany	Lebanon	delobeid@gmail.com	Faculty of Agriculture - Lebabese University	Х	X
Eliash	Nurit	Israel	norikachan@gmail.com	OIST	Х	Х
Engel	Philipp	Switzerland	philipp.engel@unil.ch	University of Lausanne, Switzerland	Х	
Erez	Tal	Israel	tal.erez2@mail.huji.ac.il	Volcani centre		Х
Evans	Jay	U.S.A	jay.evans@usda.gov	USDA-ARS Bee Research Lab	Х	Х
Evison	Sophie	United Kingdom	sophie.evison@nottingham.ac.uk	University of Nottingham	Х	
Eynard	Sonia	France	sonia.eynard@inrae.fr	INRA		X
Fabricius Kristia		Sweden	lotta.fabricius@slu.se	Swedish University of Agricultural Sciences		X
Fasasi -	Kamilu Ayo	Nigeria	ayo.fasasi@uniosun.edu.ng	Osun State University		X
Fevre - ·	Damien	New Zealand	damien.fevre@postgrad.otago.ac.nz	University of Otago		X
Forsi	Mohammad	Iran	mforsi@gmail.com	Iran Veterinary Organization (Retired)		X
Frias-Alvarez	Ariadna	Spain	arifrias@msn.com	Las Palmas de Gran Canaria University		Х
Fuad	Abdullah	Iraq	fuad.abdullah@su.edu.krd	Salahaddin university-Erbil	X	
Gajda	Anna	Poland	anna_gajda@sggw.edu.pl	Warsaw University of Life Sciences	Х	X
Galanis	Anastasios	Greece	galanis@fleming.gr	-		X
Galarza	Egoitz	Spain	egoitzgg@gmail.com	ERBEL, iberian Bee Breeding Association		Х
Gao	Jing	China	gaojing@caas.cn	Chinese Academy of Agricultural Sciences	Х	
Garncarek	Olga	Poland	owysocka7@gmail.com	University of Warmia and Masuria	X	
Genesis	Chong	U.S.A	gchon004@ucr.edu	-	X	
Ghaziani	Fatemeh	Iran	ghaziani@ut.ac.ir	University of Tehran	.,	X
Gimenez Martin		Argentina	beedarian@gmail.com	National University of Mar del Plata	X	Х
Girod	Vincent	France	vincent.girod@adaoccitanie.org	ADA Occitanie (Professionnal beekeeper association)	Х	
Giurfa	Martin	France	martin.giurfa@univ-tlse3.fr	Paul Sabatier University		Х
Gregorc	Ales	Slovenia	ales.gregorc@um.si	University of Maribor, Faculty of Agriculture and Life Sciences		Χ
Grindrod	Isobel	United Kingdom	i.r.grindrod@edu.salford.ac.uk	The university of salford		X
Guetlin	Ayaka	Switzerland	aguetlin@student.ethz.ch	-	Х	
Gusachenko	Olesya	France	oligonucleotide@gmail.com	-	Х	
Hammida	Mohamed	Belgique	mhammida@gmail.com	Research	Χ	
Harpur	Brock A.	U.S.A	b.harpur@gmail.com	Purdue University	Х	
Hatakeyama	Masatsugu	Japan	sawfly@affrc.go.jp	National Agriculture and Food Research Organization (NARO)		Х
Hatjina	Fani	Greece	fhatjina@gmail.com	Institute of Animal Science, ELGO 'DIMITRA',- GREECE	Х	
Hernan	Pietronave	Argentina	pietronave.hernan@inta.gob.ar	Instituto Nacional de Tecnologia Agropecuaria INTA	Х	
Holanda Neto	Joao Paulo	Brazil	jpholandaneto@gmail.com	Federal Institution of Education, Science and Technology of Sertao Pernambucano	Х	Х
Hu		China	huruoyang@aliyun.com	CAAS	Х	
Huang	Qiang	China	qiang-huang@live.com	Honeybee Research Institute, Jiangxi Agricultural	Х	Х
				University		
Hulaj	Beqe	Kosovo	bhulaj@yahoo.com	Albanian	Х	Х
Inamoto	Tetsuro	Japan	honeybear0528@kki.biglobe.ne.jp	Kyoto Sangyo University	X	
Jabal-Uriel	Clara	Spain	c.jabaluriel@outlook.es	CIAPA-IRIAF	Х	
Jobart	Benoit	Reunion	benoit.jobart@cirad.fr	CIRAD		Х
Jung	Chuleui	Korea Republic	cjung@andong.ac.kr	Andong National University	Х	Х
Kezic	Nikola	Croatia	nkezic@agr.hr	Penzioner	Х	
Kimura	Kiyoshi	Japan	kimura@affrc.go.jp	Institute of Livestock and Grassland Science, NARO	Х	Х
Kiseleva	Larisa	Japan	larisa.kiseleva@oist.jp	OIST Graduate University	Х	
Klaithin	Kanokwan	Thailand	kanokwan.entomo@gmail.com	Chiang Mai University		Х
Knautz	Timm	Germany	timm.knautz@ibacon.com	CRO	X	
Kowallik	Vienna	Japan	vienna.kowallik@oist.jp	OIST	X	X
Kucukozmen	Billur	Turkey	billurkucukozmen@gmail.com	Hacettepe University  Okinawa Institute of Science and Technology Graduate	X	Х
Kudo	Miyako	Japan	miyako.kudo@oist.jp	University	X	
Kunkel	Grace	U.S.A	grace@projectapism.org	Project Apis m.	X	Х
Kunz	Martin	United Kingdom	kunzm@ibra.org.uk	International Bee Research Institute	Х	Х
_amothe Boudre		Canada	maggielamotheboudreau@gmail.com	Ulaval	.,	Х
_atham _ee	Caroline	Japan Czoch Popublic	kamadutoo@yahoo.com	Meio Czech University of Life Sciences Prague	X X	Х
	Saetbyeol	Czech Republic U.S.A	lees@af.czu.cz	Agricultural research and development program, Centra		X
_i-Byarlay _in	Hongmei Zheguang	China	hli-byarlay@centralstate.edu z.lin@yzu.edu.cn	State University Yangzhou University	Х	X
_iii _una	Alba	Spain	albalunajimenez@gmail.com	National institute for research in agricultural and food	^	X
				technology (INIA)		
_und	Jennifer	U.S.A	jennifer.lund@maine.gov	State of Maine	X	X
Mani	Kannan	Israel	ahilkannanbdu@gmail.com	ARO-Volcani Research Center	X	
Massei	Aurora	Italy	massei.aurora@gmail.com	None	Х	
Matsuyama	Shigeru	Japan	matsuyama.shigeru.fu@u.tsukuba.ac.jp	Graduate School of Life and Environmental Sciences, University of Tsukuba	X	
Mazur	Ewa	Poland	ewa_mazur@sggw.pl	Warsaw University of Life Sciences	Х	Х

Speakers						
Last Name	First Name	Country	Email	Institute	OIST Mini- Symposia	COLOSS ASIA Okinawa
McGhee	Daniel	United Kingdom	danielmcghee@hotmail.com	Glasgow and District Beekeepers Association		Х
Mclean	John	New Zealand	jands.mclean@gmail.com	Apiculture New Zealand Science and Research Focus Group	Х	Х
Mikheyev	Sasha (Alexander)	Australia	sasha@homologo.us	ANU, OIST	Х	Х
MinOo	Hlaing	Myanmar	drhminoo@gmail.com	-	X	
Mohindru	Bharathi	India	bharathiento@pau.edu	Punjab Agricultural University		Х
Molinatto	Giulia	Italia	giulia.molinatto@gmail.com	University of Torino	Х	
Morawetz	Linde	Austria	linde.morawetz@ages.at	Austrian Agency for Health and Food Safety (AGES)		Х
Moro	Arrigo	Switzerland	arrigo.mr@gmail.com	Bern University		Х
Moses	Alele Okello	Uganda	alelem21@gmail.com	District Entomology Officer, Otuke District Local Government	х	
Neumann	Peter	Switzerland	peter.neumann@vetsuisse.unibe.ch	Institute of Bee Health, Vetsuisse Faculty, University of Bern	X	Х
Nicault	Lea	The Netherlands	lea.nicault@wur.nl	Wageningen University and Research	Х	
Ogihara	Mari	Japan	ogiharam590@affrc.go.jp	NARO, Tsukuba	Х	
Olgun	Tuğçe	Turkey	tugce.olgun@tarimorman.gov.tr	Aegean Agricultural Research Institute	Х	Χ
Ozgor	Erkay	Cyprus	erkayozgor@gmail.com	Cyprus International University		X
Özkırım	Asli	Turkey	asli.ozkirim@gmail.com	Hacettepe University		X
Ozsoy Taskiran	Neslihan	Turkey	neslihn@gmail.com	-	Х	Х
Palamar	Ostap	Ukraine	palamar.ostap@chnu.edu.ua	Chernivtsi National University		X
Palanichamy	Pradeep	Japan	pradeep.palanichamy@oist.jp	OIST	Х	
Panziera	Delphine	Netherlands	delphine.panziera@wur.nl	Wageningen University and Research	Х	X
Parejo	Melanie	Spain	melanie.parejo@ehu.eus	University of the Basque Country	X	
Park	Ana	U.S.A	Minhae81@gmail.com	-	Х	
Paten	Amy	Australia	amy.paten@csiro.au	CSIRO, Australia	Х	
Paxton	Robert J.	Germany	robert.paxton@zoologie.uni-halle.de	Martin Luther University Halle-Wittenberg, Germany	X	
Peloquin	Aya	Japan	aya.peloquin@oist.jp	OIST	Х	
Pereira	Daniel	Brazil	santiagoesam@gmail.com	Embrapa Amazônia Oriental	X	
Pluta	Patrycja	Polska	patrycjaa.pluta@gmail.com	University of Warmia and Mazury	X	
Poirot	Benjamin	France	benjamin.poirot@apinov.com	APINOV	^	X
				Centro de Investigación en abejas sociales, Universidad		
Porrini	Leonardo	Argentina	leoporrini@gmail.com	nacional de mar del plata		Х
Pylypko	Kateryna	Ukraine	pylypkokatya2999@gmail.com	Taras Shevchenko National University of Kyiv	Х	
Raheem	Dotsha	Iraq	dotsha.raheem@su.edu.krd	Salahaddin University-Erbil		Х
Rangel	Juliana	U.S.A	jrangel@tamu.edu	Texas A&M University	X	X
Remnant	Emily	Australia	emily.remnant@sydney.edu.au	University of Sydney	X	
Rizwan	Muhammad	Pakistan	rizwan_entomologist@yahoo.com	University of Agriculture Faisalabad Pakistan	Х	
Rodriguez	Miguel Angel	Spain	miguelangel.rodriguez@vetopharma.com	UCM		Χ
Rogenstein	Steve	Germany	ambeessadors@gmail.com	The Ambeessadors		Χ
Russo	Romina	Argentina	romina.russo@gmail.com	Instituto Nacional de Tecnologia Agropeacuaria	Х	
Santrac	Violeta	Bosnia & Herzegovina	vsantrac@yahoo.com	Public Veterinary Institute of the Republic of Srpska "Dr	Х	
Sawe	Thomas	Tanzania	tcorodius87@gmail.com	Vaso Butozan" Banaj Luka Tanzania Forestry Research Institute	X	Х
Scannapieco	Alejandra	Argentina	alejandrascannapieco@gmail.com	Consejo Nacional de Investigaciones Cientificas y Tecnicas (CONICET) - Instituto Nacional de tecnologia		Х
Seltzer	Pvo	Israel	rya3683@gmail.com,	Agropecuaria (INTA) School of Zoology George S. Wise Faculty of Life	Х	Х
	Rya		ryaseltzer@gmail.com	Sciences, Tel Aviv University National Research Center "PI Prokopovich Institute of		^
Senchuk	Tetiana	Ukraine	Senchuktanya.bee@gmail.com	Beekeeping"	Х	
Shafiey	Hassan	Iran	h.shafiey@gmail.com	Ferdowsi University of Mashhad	Х	
Shahzad	Ali	Pakistan	shahzad.ali@uvas.edu.pk	University of Veterinary and Animal Sciences, Lahore		Х
Shoaib Saleem	Muhammed	Pakistan	shoaibsaleemkhan@gmail.com	University of Karachi		Х
Šima	Peter	Slovakia	psima@koppert.sk	Koppert s.r.o. (Koppert Biological Systems)	Х	
Skerbis	Suzana	Slovenia	Suzana.Skerbis@vf.uni-lj.si	University of Ljubljana		X
Soroker	Victoria	Israel	sorokerv@volcani.agri.gov.il	Volcani Institute		X
Staron	Martin	Slovakia	martin.staron@nppc.sk	-	Х	
Stevanovic	Jevrosima	Serbia	rocky@vet.bg.ac.rs, jevrosima.stevanovic@gmail.com	University of Belgrade	X	Х
Tatlisulu	Sual	Turkey	sualtatlisulu@gmail.com	Hacettepe University		Х
Techer	Maeva	Japan	maeva.angelique.techer@gmail.com	OIST	Х	X
Teixeira	José Luis	Portugal	joseluisteixeira1@hotmail.com	University Trás-os-Montes e Alto Douro	X	
Theodorou	Panagiotis	Germany	panatheod@gmail.com	MLU Halle-Wittenberg	X	
Tipton	Elizabeth	Japan	tiptoemfm@yahoo.com	CCBC	X	
Toporcak	Juraj	Slovakia	toporcaktoporcak@gmail.com	University of Veterinary Medicine and Pharmacy	X	X
Tornow	Peter	Germany	petertornow@web.de	University of Halle-Wittenberg	Х	
Ullah	Amjad	Pakistan	amjadullah609@gmail.com	Kohat University of Science and Technology Kohat	X	Х
Valizadeh	Pegah	Iran	valizadehpegah@gmail.com	Pakistan Animal Science Research Institute of Iran	X	Х
Valon	Mustafi	Germany	valizadenpegan@gmaii.com valon.mustafi@outlook.de	- Tumnar Ocionoc (1036a) On Institute Of Itali	X	^
valon Van den wildenbe		Netherlands	degroeneimkerij@gmail.com	- -	X	
				Alvous AR Consultance	^	~
van der Steen	Jozef	Netherlands	alveusab@outlook.com	Alveus AB Consultancy	V	Х
VanEngelsdorp	Dennis	U.S.A	dvane@umd.edu	University of Maryland	Χ	

Speakers						
Last Name	First Name	Country	Email	Institute	OIST Mini- Symposia	COLOSS ASIA Okinawa
Visick	Oliver	United Kingdom	ov32@sussex.ac.uk	University of Sussex	Х	Х
Volkov	Roman	Ukraine	r.volkov@chnu.edu.ua	Dept. of Molecular genetics and biotechnology, Yuriy Fedkovych Chernivtsi National University, Chernivtsi	Х	
Watanabe	Kazuyo	Japan	kazuwata@affrc.go.jp	NARO		X
Williams	Anthony	United Kingdom	anthony.williams@dmu.ac.uk	De Montfort University		Х
Woodford	Luke	United Kingdom	lw86@st-andrews.ac.uk	University of St Andrews	Χ	X
Wu	Ming-Cheng	Taiwan	mcwu12@gmail.com	Department of Entomology, Nation Chung Hsing University	X	Х
Xu	TianGang	Japan	t.xu@oie.int	OIE	Χ	
YN	Venkatesh	India	venkateshyn27@gmail.com	ICAR- Central Agroforestry Research Institute		Χ
Yazlovitska	Liudmyla	Ukraine	I.yazlovitska@chnu.edu.ua	Yuriy Fedkovych Chernivtsi National University		X
Yelkovan	Sedat	Turkey	syelkovan@bingol.edu.tr	Bingol University		X
Yokoi	Kakeru	Japan	yokoi123@affrc.go.jp	Institute of Agrobiological Sciences (NIAS), National Agriculture and Food Research Organization		Х
Yuntao	Lu	China	2768291001@qq.com	Shandong Agricultural University	Χ	
Zareef	Haroon	Germany	aaron.zareef@outlook.com	CAU - Kiel University	Х	
Zheng	Huoqing	China	hqzheng@zju.edu.cn	Zhejiang University	Х	X