Program

Mugunghwa Hall

Time	Mugunghwa Hall 2024-02-19 (Mon)	
12:00-13:00	Registration	
13:00-13:30	40th Annual Meeting of Apicultural Society of Korea	
13:30-14:00	Opening Ceremony	
14:00-14:10	Special Talk I: Jung-sook Kim (Ministry of Agriculture, Food and Rural Affairs, Livestock Policy Division, Director General)	
14:10-14:50	Plenary Lecture I. Dr. Jeff Pettis (APIMONDIA President) Beekeeping in a changing world, new pests and more!	
14:50-15:00	Coffee Break	
15:00-15:30	Invited Lecture I. Prof. Huoqing Zheng (Zhejiang University, China) Filling gaps in the understanding of the relationship between *Varroa spp.* and *Apis cerana*	
15:30-17:00	Bee Health I.	
	O-1	The influence of *Varroa destructor* on virus infection of honeybees from the perspective of virome analysis Ruike Wei, Zhejiang University
	O-2	Acaricidal susceptibility of *Varroa destructor and Tropilaelapsmercedesae*in *Apis mellifera* colonies Hyunha Oh, Andong National University
	O-3	Acaricidal Activity of major component from *Cymbopogon citratus*in Combination with Other Monoterpenes, on *Varroa destructor* and Honey bees TekalignBegna, Andong National University
	O-4	Development of a Multiplex RT-PCR Diagnostic Method for the Predominant Three Species of Honey Bee Viruses in Uzbekistan So-yoon Jang, Andong National University
	O-5	Development and Application of RT-RPA Based Detection Methods for the Diagnosis of Bee Viruses Man-Cheol Son, Andong National University
	O-6	The role of vaccination in sustainable hive health: a One Health discussion Nigel Swift, Dalan Animal Health, USA
17:00-17:10	Coffee Break	
17:10-17:20	Special Talk II: Yong-Kwon Lee (Forest Resources Division, Deputy Director General / Ph.D)	
17:20-18:00	Plenary Lecture II. Prof. Keon Mook Seong (Chungnam National University) Development of RNAi method to control *Varroa destructor*: lethal effects of knockdown of coatomer proteins	
18:30-	Conference Dinner	
Time	**Mugunghwa Hall 2024-02-20 (Tue)**	
09:00-09:30	Invited LectureIII. Norman L Carreck (Carreck Consultancy Ltd.)	
	The COLOSS association and the BEEBOOK project	
09:30-10:10	Bee Health II.	
	O-12	The task forces of the COLOSS association and its missions Victoria Soroker, Agricultural Research Organization, Israel
	O-13	Taxonomic notes on parasitic mites on honeybee in Korea Jaeseok Oh, Seoul National University
	O-14	The larvae of greater wax moth, *Galleria mellonella* affects the health of adult honeybees Yanling Xie, Zhejiang University, China

10:10–10:20	Coffee Break	
10:20–11:40	Bee Heath II	
	O-15	Potential control of *Vespa velutinanigrithorax*using sex pheromone Dongeui Hong, Andong National University
	O-16	Phenological and compositional changes of Vespa species from the long term monitoring data in Korea SeongbinBak, Andong National University
	O-17	Effects of imidacloprid on Hypopharyngeal glands and GST isoenzyme profile Fani Hatjina, EllinikosGeorgikosOrganismos 'DIMITRA', Greece
	O-18	Enhancing Honeybee Resilience: Curcumin as an Antidote to Mitigate Carbaryl-Induced Harm and Promote Sustainable Pollination Saeed MohamadzadeNamin, Andong National University
	O-19	Exploring the Impact of Different Carbohydrate Types on Honeybee Longevity and Hypopharyngeal Gland Dimensions ArezooNajarpoor, Andong National University
	O-20	Identifying Effects and Markers Related to *Apis mellifera* ligusticaHoney Bee Health Olga Frunze, Incheon National University
11:40–12:00	Poster Presentation (Mugunghwa Hall Lobby)	
12:00–13:30	Lunch	
13:30–14:10	Plenary Lecture III. Victoria Soroker (COLOSS Varroa TF, Israel) The chemosensory machinery of the Varroa mite	
14:10–14:20	Coffee Break	
14:20–16:50	Symposium II. Expanding honey forest and enhancing public service	
	Invited Lecture VI. Angus McPherson (NZ Trees for Bees Research Trust) Designing and Establishing Multi-function Bee Forage Planting to Support Beekeepers and Farmers	
	S-11	Major honey plants in the central region of Korea, evaluated by foraging preferences of honeybees Seunghun Jung, Seoul National University
	S-12	Threats to Honeybee: Investigation of Potential Predators in Apiary Jong-Hwa Oh, Seoul National University
	S-13	Habitat Suitability Assessment of Major Honey Tree Species in Mt. Gariwang and Mt. Yumeong Yong-Ju Lee, Kookmin University
	S-14	Economic valuation of pollination resources in national forests of Mt. Gariwang and Mt. Yumyeong relative to beekeeping Kwanhui Lee, Andong National University
	S-15	Development of evaluation indicators and case application research for the creation of honey plant complex Sora Kim, Korea Forest Conservation Association
	S-16	Proposals for the Expansion of Honey Plant Complexes in Korea Sung-Joon Na, National Institute of Forest Science
	S-17	Effects of Rising Winter Temperatures and Day Length on Spring Flowering Time in Future Warm Climates Sukyung Kim, Seoul National University
	S-18	A report on changes in spring flowering duration of seven Korean tree species over the last 52 years and the potential resultant effect at the community-level Min-Jung Kim, National Institute of Forest Science
17:00–	Closing Ceremony	

Time	Mokryon Hall 2024-02-19 (Mon)	
15:00-16:10	Bee Product	
	O-7	Evaluating Royal Jelly Quality from Korean Commercial Apiaries and Analyzing the Nutrient Content impact of Honey bee Feed Sampat Ghosh, Andong National University
	O-8	Unveiling Floral Diversity and Nutritional Profiling of Bee Pollens from Uzbekistan Sukjun Sun, Andong National University
	O-9	Characterization of volatile compound detected in drone pupa (*Apis mellifera* L.) fat extract Seonmi Kim, National Institute of Agricultural Science
	O-10	The R&D of immunity strengthening functional propolis products by the water-soluble cocktail method Hadong Kim, Seoul Propolis Co., Ltd. R&D Center
	O-11	Pancreatic cancer cell death and blood sugar regulation by propolis and honey mixture Kim Sung-Kuk, National Institute of Agricultural Science
16:10-16:40	Invited LectureII. Dr. BajareeChuttong (Chiang Mai University, Thailand) Guidelines for establishing a quality standard for honey produced by the stingless bee genus Tetragonula in Thailand	
Time	**Mokryon Hall 2024-02-20 (Tue)**	
09:00-09:30	Invited Lecture IV. Prof. LekhnathKafle (National Pingtung University, Taiwan) Efficacy of probiotic and prebiotic supplements on honeybee productivity and strength	
09:30-10:10	Pollination & Honey Plants	
	O-21	Assessing niche overlap of bees, butterflies, and hoverflies in plant-pollinator networks Ehsan Rahimi, Andong National University
	O-22	Environmental Big Data based Implementation of the Honey Production Environment Grade Map Jea-Chul Kim, AirTech Inc
	O-23	The characteristics of *Tilia mandshurica* Rupr.&Maxim. as major honey plants and the selection of superior tree Sea Hyun Kim, Sunchon National University / Korea Forest Research Institute
10:10-10:20	Coffee Break	
10:20-11:30	Bee Biology	
	O-24	Stingless Bees Tongue Morphology is Different Compared to Honeybees Sarah Najiah Ramli, Universiti Malaysia Terengganu, Malaysia
	O-25	Morphological Exploration of *Apis cerana* with different colors in South Korea Hyeonjeong Jang, Andong National University
	O-26	Honeybee genetic resource and national diffusion system in Korea Chang-hoon Lee, National Institute of Agricultural Science, RDA
	O-27	Predictive Modeling of Honeybee Winter Mortality in Response to weather Anomalies : Utilizing 'Honeybee Meteorological Index' Sunghyun Min, National Institute of Agricultural Science
	O-28	Comparison of the expression levels of cytochrome P540 monooxygenases between *Apis cerana* and *Apis mellifera* (Hymenoptera: Apidae) in response to various insecticides Youngcheon Lim, Seoul National University

11:30-12:00	Poster Presentation (Mugunghwa Hall Lobby)	
12:00-13:30	Lunch	
13:30-14:20	Coffee Break	
14:20-16:50	Symposium III. Control of infectious diseases in honeybee	
	S-19	Evaluation of efficacy of lactic acid bacteria from Honeybee for American foulbrood and Nosemosis Mi-Sun Yoo, Animal and Plant Quarantine Agency,
	S-20	Prevalence and Trends of Honeybee Diseases in the Republic of Korea Thi-Thu Nguyen, Animal and Plant Quarantine Agency,
	S-21	Diganosis of Honeybee Disease using Point-of-care-testing technique Choi, Ok Ran, Genesystem Co., Ltd.
	S-22	Efficacy of complex plant extracts (Winning bee plus) for varroa mite Sung-Min Lee, CTC VAC
	S-23	Development and Clinical Evaluation of Point of Care qPCR for Notifiable Infectious Diseases of Bee Doo-Sung Cheon, DVM, PhD., POSTBIO Inc
	S-24	Association between Honeybee (*Apis mellifera* L.) diseases and CCD in Korea Juhaeng Heo, Korea Apicultural Agriculture Cooperative

Time	Suryon Hall 2024-02-19 (Mon)	
15:00-17:00	Symposium I. The current Status and Future Prospects of Digital (smart) Beekeeping	
	S-1	Controlling *vespa velutina* nest using drone Su-Bae Kim, National Institute of Agricultural Sciences, RDA
	S-2	*Vespa Velutina* Nest Detection using Visual Camera Inchan Choi, National Institute of Agricultural Sciences
	S-3	Development of Unmanned Aerial Vehicles-based Wasp Tracking and Habitat Search Technology Bosung Kim, Chonnam National University
	S-4	Vespa detection and monitoring based on deep learning model Cheolhee Lee, Department of Computer Engineering, Andong National University
	S-5	Status and the Prospect of Smart Beekeeping for Sustainable Apiculture Won-ki Chung, Onfarm Corp.
	S-6	Application of engineering technology for honey bee pest management Changyeun Mo, Kangwon National University
	S-7	Current Status and Perspectives of Intelligent Beekeeping Management Device Developments Xiongzhe Han, Kangwon National University
	S-8	Conditions and functions of smart honey bee house for overwintering study Yongrak Kang, Andong National University
	S-9	Utilizing Sensing Technology for Honeybee Colony Monitoring Byoung-Jo Choi, Incheon National University
	S-10	Utilization of ChatGPT in Beekeeping Industry and Apiculture Research Daegeun Oh, National Institute of Agricultural Science
Time	**Suryon Hall 2024-02-20 (Tue)**	
09:00-11:30	Symposium IV. (Honeybee Viruses and Pathogens (with COLOSS Virus TF))	
	Invited Lecture V. Delphine Panziera (Wageningen University & Research) Chronic bee paralysis and winter mortality in the Netherlands	
	S-25	Is commercial trade of queens a way for virus spread? Anne Bonjour-Dalmon, INRAE, Bees and the Environment research department, France
	S-26	Habitat structure and virome examination in newly field-exposed bumble bees Orlando Yañez, University of Bern, Switzerland
	S-27	RNAi as a honeybee virus repressor: case studies and potentials June-Sun Yoon, Jeonbuk National University
	S-28	The chronicle of dsRNA for apiculture; a new agent to control pathogens of the honeybees Woojin Kim, Genolution Inc.
	S-29	Proteomics and immune response differences in *Apis mellifera* and *Apis cerana* inoculated by three Nosema ceranae isolates Terd Disayathanoowat, Chiang Mai University, Thailand
	S-30	Unveiling Novel and Unreported Honeybee Viruses in South Korea, 2023: A Fresh Perspective on Beekeeping Epidemiolog Minhyeok Kwon, Andong National University
	S-31	Harnessing the Bee Virome: A Novel Tool for Unearthing Unreported and Emerging Plant Viruses Jiho Jeon, Andong National University

11:30-12:00	Poster Presentation	
12:00-13:30	Lunch	
13:30-14:20	Coffee Break	
14:20-16:50	Beekeeping	
	O-29	Conservation of honey bees in Britain and Ireland Norman L Carreck, Carreck Consultancy Ltd., United Kingdom
	O-30	Stingless bee-friendly garden for the sustainability of beehives Norasmah Basari, Universiti Malaysia Terengganu, Malaysia
	O-31	Robotic System Design In Royal Jelly Production Sedat Sevin, Ankara University, Turkiye
	O-32	Responses of the Climate Change impact on *Apis cerana* beekeeping in Korea Yeonjeong Lee, Andong National University
	O-33	Development of a Separator-Free Gate to Count the Entry and Exit of Bees Si-u Bak, Incheon National University
	O-34	Consideration of Existing Beehive Entry-Exit Counting Systems and the Necessity of a Dedicated Image-Based Algorithm Jinseong Lee, Incheon National University
	O-35	Development of a multi-beekeeping object detection model for Integrated pest management of Beekeeping Hong Gu Lee, Kangwon National University
	O-36	Development of the migratory beekeeping information system by GIS (Geographic Information Systems) Kyeong Yong Lee, The National Academy of Agricultural Science
	O-37	Effects of Clothianidin Pesticide Application on the Strength of Honey Bee Colonies and Stress-Related Genes in the Vicinity of Rice Fields in the Republic of Korea Minwoong Son, National Institute of Agricultural Science