

SYMPOSIA

Update: June 16, 2014

Update: July 3, 2014

Update: July 8, 2014

Update: July 9, 2014

July 14 (MONDAY) ROOM1

#4-01 Acari descriptive taxonomy: General and additional requirements

Organizer : Farid Faraji

14:00~14:05 Introduction

14:05~14:35 **S4-01-1 Ashley P. G. Dowling** : Molecules, morphology, and cybertaxonomy: bringing the whole toolbox to descriptive mite projects.

14:35~15:05 **S4-01-2 Jennifer J. Beard, Ronald Ochoa, Gary R. Bauchan, and Evan Braswell** : *Brevipalpus phoenicis* Geijskes species complex - resurrection of E. W. Baker' species (Acari: Tenuipalpidae).

15:05~15:35 **S4-01-3 Fabio Bernini** : Basic requirements for species-group and genus-group revisions. Examples from Oribatid mites (Acari, Oribatida).

15:35~16:00 Coffee break

16:00~16:15 **S4-01-4 Jeanette Stålstedt** : Matching adults and larvae with the help of DNA.

16:15~16:30 **S4-01-5 Philipp E. Chetverikov** : Basal divergence of Eriophyoidea (Acariformes, Eupodina) inferred from combined partial COI and 28S gene sequences and CLSM comparative genital anatomy.

16:30~16:45 **S4-01-6 Philipp E. Chetverikov** : What is the origin of the genital “flower-shaped” figures rarely observed in genital areas of eriophyoids (Acariformes, Eriophyoidea)?

16:45~17:00 **S4-01-7 Farid Faraji** : Significance of peritremes in describing Phytoseiidae.

17:00~17:05 Closing remarks

July 14 (MONDAY) ROOM2

#1-07 Soil acarine biological control

Organizer : Chuleui Jung

- 14:00~14:05 Introduction
- 14:05~14:25 **S1-07-1 Carlos HW Flechtmann** : Two hundred years without the enemy.
- 14:25~14:45 **S1-07-2 Gilberto Jose de Moraes** : *Lasioseius phytoseioides* species group (Acari: Mesostigmata: Blattisociidae): new characterization, description of a new species and complementary notes on described species.
- 14:45~15:05 **S1-07-3 Miki Saito** : Composition of predatory mite species in spinach greenhouses and their predatory abilities against *Tyrophagus similis* Volgin.
- 15:05~15:25 **S1-07-4 Eunsun Keum** : Potential of biological control of bulb mite, *Rhizohlyphus robini* using predatory mites in garlic field.
- 15:25~15:45 **S1-07-5 Jun Taek Kang** : Multiplication of biocontrol agents to control the soil insect pests in horticulture in Korea.
- 15:45~16:00 Coffee break
- 16:00~16:20 **S1-07-6 Yvonne van Houten** : Evaluation of *Euseius gallicus* as biological control agent of western flower thrips and greenhouse whitefly in roses.
- 16:20~16:40 **S1-07-7 Raul T Villanueva** : Activity of a phytoseiid mite on the population of the potato psyllid in the subtropical region of Texas.
- 16:40~17:00 **S1-07-8 Hidenari Kishimoto** : Effects of pollen on the conservation of native phytoseiid populations in fruit orchards.
- 17:00~17:20 **S1-07-9 Mohamed Abdul Haq** : Organic agriculture through oricultural farming practices.
- 17:20~17:40 **S1-07-10 Chuleui Jung** : Soil gamasid mites as potential biological control agents in soil agroecosystem.
- 17:40~18:00 Discussion

July 14 (MONDAY) ROOM3

#4-03 Ecology and Evolution of soil mites in extreme and special habitats

Organizer : Tobias Pfingstl

- 14:00~14:05 Introduction
- 14:05~14:30 **S4-03-1 Jiwon Kim** : Diversity of oribatid mites (Acari: Oribatida) in different habitats.
- 14:30~14:55 **S4-03-2 Maka Murvanidze** : Oribatid mite responses to heavy metal contamination in post-smelting dumps.
- 14:55~15:20 **S4-03-3 Julia Maria Jagersbacher-Baumann** : Scutacarid mites associated with bumble bees (Scutacaridae, Heterostigmatina; *Bombus*, Hymenoptera).
- 15:20~15:45 **P3-15 Jaroslav Smrz**: Wellness or sickness of mites related to the accompanied phenomena of digestibility of mite food - the biological and ecological consequences.
- 15:45~16:05 Coffee break
- 16:05~16:30 **S4-03-5 Juliana Mendonca dos Santos Lopes** : Mites riding ants: could they be useful for inferences on conservation?
- 16:30~16:55 **S4-03-6 Natalia V. Lebedeva** : Avian vector of soil mites in the High Arctic.
- 16:55~17:20 **Ekaterina Sidorchuk** : Acarine paleodiversity and evolution: mites in the fossil resins
- 17:20~17:45 **S4-03-8 Valerie Behan-Pelletier** : Multiple independent origins of sexual dimorphism in Oribatida: a response to periodically dry habitats?
- 17:45~18:10 **S4-03-9 Satoshi Shimano** : Oribatid mites living in detritus on seashore in Japan.
- 18:10~18:35 **S4-03-10 Tobias Pfingstl** : Living in the marine intertidal: How oribatid mites manage to survive in this periodically changing environment.
- 18:35~18:40 Closing remarks

July 14 (MONDAY) ROOM4

#3-01 Mating and sex allocation strategies in mites

Organizers : Sara Magalhães, Isabelle Olivieri and Keiko Oku

- 14:00~14:05 Introduction
- 14:05~14:20 **S3-01-1 Bram Knegt** : Can coadapted gene complexes explain incompatibilities between two types of *Tetranychus evansi*?
- 14:20~14:35 **S3-01-2 Salomé Clemente** : Asymmetric reproductive interference among two spider mite species.
- 14:35~14:50 **S3-01-3 Peter Schausberger** : Contrasting patterns of remating, paternity and reproductive success in polyandrous *Neoseiulus californicus* and *Phytoseiulus persimilis*.
- 14:50~15:05 **S3-01-4 Leonor Rodrigues** : Sperm precedence and potential sexual conflicts in the spider mite *Tetranychus urticae*.
- 15:05~15:20 **S3-01-5 Tomasz Marquardt** : Observations on the pre-ovipositional and ovipositional behaviour of *Lasioseius ometes* (Oudemans) and *Hypoaspis kargi* Costa (Acari: Dermanyssidae: Ascidae, Laelapidae).
- 15:20~15:35 **S3-01-6 Yukie Sato** : Alternative male mating tactics in the two-spotted spider mite (*Tetranychus urticae* Koch) : A life history perspective.
- 15:35~16:05 Coffee break
- 16:05~16:20 **S3-01-7 Tetsuo Gotoh** : *Wolbachia* and *Cardinium* endosymbionts distort offspring sex ratio of tetranychid mites.
- 16:20~16:35 **S3-01-8 Flore Zélé** : Endosymbiont diversity in natural populations of *Tetranychus* mites is rapidly lost following laboratory adaptation.
- 16:35~16:50 **S3-01-9 Alison B Duncan** : Impact of the maternal environment on sex allocation behaviour in the spider mite *Tetranychus urticae* under variable local mate competition.
- 16:50~17:05 **S3-01-10 Sara Magalhães** : The evolution of sexual conflicts in *Tetranychus urticae*.
- 17:05~17:20 Discussion

July 15 (TUESDAY) ROOM1

#3-03 Interactions in communities of plant-inhabiting mites

Organizers : Arne Janssen and Yasuyuki Choh

09:45~09:50 Introduction

09:50~10:20 **S3-03-1 Rostislav Zemek** : The effect of coccinellid and chrysopid larvae cues on behaviour of spider mites.

10:20~10:50 **S3-03-2 Takeshi Shimoda** : Flight dispersal of specialist insect predators to exploit patchily distributed spider mites.

10:50~11:20 **S3-03-3 Renato Almeida Sarmiento** : Active prey mixing as an explanation for polyphagy in predatory arthropods: synergistic dietary effects on egg production despite a behavioural cost.

11:30~12:00 **S3-03-4 Felipe Lemos** : Host plant affects the quality of *T.evansi* as prey.

12:00~12:30 **S3-03-5 Yasuyuki Choh** : Counterattack by predatory mites with experience with predation.

12:30~12:35 Closing remarks

July 15 (TUESDAY) ROOM2

#1-04 Sustainable control of phytophagous mites

Organizer : Josep A. Jacas and Patrick De Clercq

- 10:00~10:05 Introduction
- 10:05~10:30 **S1-04-1 Menelaos Stavrinides** : Conservation of predatory mites in vineyards: ecotoxicology of pesticides and adjuvants.
- 10:30~10:55 **S1-04-2 María del Mar Fernández, Pilar Medina, Pedro Del Estal, Guy Smagghe, Elisa Viñuela**: Non-target effects of modern pesticides on the predatory mite *Amblyseius swirskii* (Athias-Henriot) (Acari: Phytoseiidae), important biological control agent in horticultural crops of Almeria, Southeastern Spain.
- 10:55~11:20 Coffee break
- 11:20~11:45 **S1-04-3 Dominiek Vangansbeke** : Diurnal temperature alternations affect dynamics between the two-spotted spider mite and its phytoseiid predators.
- 11:45~12:10 **S1-04-4 Ioanna Fragkoudi** : Nitro-oxidative response of *Medicago truncatula* plants to two-spotted spider mite infestation under water stress conditions.
- 12:10~12:35 **S1-04-5 Eric Palevsky** : Augmentation and conservation biological control of the citrus rust mite in Israel.
- 12:35~14:00 Lunch
- 14:00~14:25 **S1-04-6 Norihide Hinomoto** : Evaluation of population structure of *Neoseiulus womersleyi* by using molecular markers for conservation biological control.
- 14:25~14:50 **S1-04-7 Alicja Chorazy** : Environmental risk assessment of introduction an exotic predatory mite species, *Amblydromalus limonicus* in Poland.
- 14:50~15:15 **S1-04-8 Josep A Jacas** : Food web engineering to enhance natural regulation of *Tetranychus urticae* in citrus.
- 15:15~15:20 Closing remarks

July 15 (TUESDAY) ROOM3

#5-01 Recent advance in Acarology in East and South East Asia

Organizers : Yan Xuan Zhang, Zhi Qiang Zhang and Yutaka Saito

09:45~09:55 Introduction

09:55~10:20 **S5-01-1 Yanxuan Zhang** : Recent advance in biological control of mite and insect pests by predacious mites in China.

10:20~10:45 **S5-01-2 Manita Kongchuensin** : Recent advance in biological control of mite pests by predatory mites in Thailand.

10:45~11:10 **S5-01-3 Chuleui Jung** : Recent advance in acarology in Korea.

11:10~11:25 Coffee break

11:25~11:50 **S5-01-4 Gen Takaku** : History and recent advance in Acarology in Japan.

11:50~12:15 **S5-01-5 Lin Jianzhen** : Recent advance in Acarology in China.

12:15~12:35 Discussion

12:35~12:45 Closing remarks

July 15 (TUESDAY) ROOM4

#3-05 Mites Under the Sun

Organizers : **Katsura Ito and Masaaki Sudo**

- 09:45~10:10 **S3-05-1 Katsura Ito** : Genetic variation in spider mite diapauses.
- 10:10~10:30 **S3-05-2 Tomoe Sekido** : Direct and indirect advantages of spider mite diapause on predator avoidance.
- 10:30~10:55 **S3-05-3 Shin G Goto** : Physiological and genetic dissection of photoperiodism in *Tetranychus urticae*.
- 10:55~11:25 Coffee break
- 11:25~11:50 **S3-05-4 Astrid Bryon** : Winter blues in Acari: complete gene expression profiling of *Tetranychus urticae* during diapause.
- 11:50~12:15 **S3-05-5 Masahiro Osakabe** : The sun and plant-dwelling mites: an overview.
- 12:15~12:40 **S3-05-6 Yasumasa Murata** : Reciprocity in UV damage and photoreactivation of spider mites.
- 12:40~14:00 Lunch
- 14:00~14:25 **S3-05-7 Masaaki Sudo** : Solar radiation as a determinant of acarine community assembly and seasonal dynamics.
- 14:25~14:50 **S3-05-8 Eric Palevsky** : Light induced plant mediated effects on the establishment of spider mites and plant feeding predatory mites.
- 14:50~15:15 **S3-05-9 Masaya Tanaka** : Physical control of the two-spotted spider mite *Tetranychus urticae* using a combination between ultraviolet-B lamp and reflective sheet in strawberry.
- 15:15~15:30 General discussion

July 16 (WEDNESDAY) ROOM1

#1-01 Behavior and sensory ecology

Organizers : Takeshi Suzuki and Takeshi Kojima

09:45~09:50 Introduction

09:50~10:10 **S1-01-1 Katarzyna Michalska** : Do eriophyoid mites respond to cues of predation risk? The case of the eriophyoid *Aculops allotrichus*.

10:10~10:30 **S1-01-2 Guillaume Le Goff** : Effects of silk web on the locomotor activities of spider mites.

10:30~10:50 **S1-01-3 Takeshi Suzuki** : Disappearance of photo-orientation behavior in eye-ablated *Tetranychus urticae*.

10:50~11:10 **S1-01-4 Takeshi Kojima** : Acarian chemotaxis as a model for chemo-orientation studies in acarology.

11:10~11:15 Discussion

July 16 (WEDNESDAY) ROOM1

#3-02 Behavioral ecology of mites

Organizer : Peter Schausberger

- 14:00~14:20 **S3-02-1 Andreas Walzer** : Sex-specific body size effects on mating behavior of the predatory mites *Phytoseiulus persimilis* and *Neoseiulus californicus*.
- 14:20~14:40 **S3-02-2 Keiko Oku** : Sex-dependent responses toward predation risk during precopulatory mate guarding in the two-spotted spider mite.
- 14:40~15:00 **S3-02-3 Hasan Rahmani** : Repeatability of aggressiveness against con- and heterospecific prey in the predatory mite *Neoseiulus californicus* (Acari: Phytoseiidae).
- 15:00~15:20 **S3-02-4 Shuichi Yano** : Antipredator behaviors of webbing and non-webbing spider mites.
- 15:20~15:45 Coffee/tea break
- 15:45~16:10 **S3-02-5 Maurice W. Sabelis** : Evolution of diapause timing in an acarine predator-prey system on apple: a matter of phylogeny or ecology or both?
- 16:10~16:35 **S3-02-6 Yutaka Saito** : Social lives of *Stigmaeopsis* spp.
A short review of spider mite sociality.
- 16:35~17:00 **S3-02-7 Peter Schausberger** : Family affairs in predatory mites but who is family?

July 16 (WEDNESDAY) ROOM2

#1-06 Prospects for control of Red Palm Mite ten years after its invasion to the Neotropics

Organizers : Daniel Carrillo and Jorge E. Peña

- 10:00~10:05 Introduction
- 10:05~10:35 **S1-06-1 Ronald Ochoa** : Revision of the genus *Raoiella* (Acari: Tenuipalpidae) of the world.
- 10:35~10:45 **S1-06-2 Denise Navia** : The red palm mite *Raoiella indica* in Brazil - status, potential distribution, and control perspectives.
- 10:45~11:05 **S1-06-3 Gabriel Otero** : Biological attributes of *Raoiella indica* related to its potential as invasive pest.
- 11:05~11:20 Coffee break
- 11:20~11:40 **S1-06-4 Bryony Taylor** : Surveys to elucidate the host range and associated natural enemies of *Raoiella indica* (Red Palm Mite) in the Nariva Swamp.
- 11:40~12:00 **S1-06-5 Edith Estrada** : Management strategies for *Raoiella indica* Hirst (Acari:Tenuipalpidae) in urban and reserved areas in Quintana Roo, Mexico.
- 12:00~12:25 **S1-06-6 Daniel Carrillo** : Effect of *Amblyseius largoensis* (Acari: Phytoseiidae) on *Raoiella indica* (Acari: Tenuipalpidae) using predator exclusion and predator release techniques.
- 12:25~12:40 **S1-06-7 Carlos Vazques** : Life cycle of *Raoiella indica* Hirst (Acari: Tenuipalpidae) on ornamental plants, mostly Arecaceae.
- 12:40~13:00 Discussion & closing remarks

July 16 (WEDNESDAY) ROOM2

#1-03 False spider mites and their impact to global agriculture and trade
Organizers : Jose Carlos V Rodriguez and Jorge E. Peña

- 14:15~14:20 Short introduction
- 14:20~14:40 **S1-03-1 Jennifer Beard** : Flat mites of the world.
- 14:40~15:00 **S1-03-2 Gabriel Otero-Colina** : Citrus leprosis in Mexico and vectors involved.
- 15:00~15:20 **S1-03-3 Jorge E. Peña** : Biodynamics of *Brevipalpus* sp., in different host plant species.
- 15:20~15:40 **S1-03-4 Elizeu B Castro** : A study of the species of *Tenuipalpus* (Acari: Tenuipalpidae) deposited in the Smithsonian USNM Insect & Mite Collection.
- 15:40~16:00 Coffee break
- 16:00~16:20 **S1-03-5 Isis Carolina Souto de Oliveira** : Molecular systematics for *Brevipalpus* mites - assembling the puzzle.
- 16:20~16:40 **S1-03-6 Jose Carlos V Rodriguez** : Impact of red palm mite in the Caribbean.
- 16:40~17:00 Discussion of both #1-03 and #1-06

July 16 (WEDNESDAY) ROOM3

#3-06 Pathogens and other microbial associates of mites and ticks

Organizers : ~~Sreerama Kumar Prakya~~ and Takashi Tsunoda

10:10~10:15 Introduction

~~09:50~10:15 S3-06-1 Sreerama Kumar Prakya : Pathogens and other microbial associates of mites and ticks: an introduction to the symposium.~~

10:15~10:40 **S3-06-2 Patrícia S. Gôlo** : Perspectives on the use of entomopathogenic fungi to control ticks.

10:40~11:00 Coffee break

11:00~11:25 **S3-06-3 Mohammad Shaef Ullah** : Pathogenicity of the entomopathogenic fungus, *Beauveria bassiana* on two spotted spider mite *Tetranychus urticae* (Acari: Tetranychidae) at various regimes of humidity.

11:25~11:50 **S3-06-4 Louwrens R Tiedt** : Ectosymbionts on *Nannodromus reveilleti* Fernandez et al., 2014 (Acari: Anystida: Saxidromidae).

11:50~12:15 **S3-06-5 Medea Burjaanadze** : Pathogenicity of Bb 007 for the control of *Panonychus hadzhibejliae* (Acari: Tetranychidae).

12:15~12:45 Discussion and closing remarks

July 16 (WEDNESDAY) ROOM3

#4-02 Mite and invertebrate symbiosis

Organizers : Barry M OConnor and Kimiko Okabe

14:00~14:05 Introduction

14:05~14:35 **S4-02-1 Barry M. OConnor** : Observations on the phylogeny of the family Canestriniidae, mites associated with Coleoptera.

14:35~15:00 **S4-02-2 Kimiko Okabe** : Symbiotic specificity between lucanid beetles and canestriniid mites.

15:00~15:30 **S4-02-3 Masaaki Adachi** : Indirect effects of aphids on spider mites via ants.

15:30~15:50 Coffee break

15:50~16:20 **S4-02-5 Qinghai Fan** : Mites associated with honeybee *Apis mellifera* in New Zealand.

16:20~16:50 **S4-02-6 Pavel Klimov** : Phylogeographic history and diversification of chaetodactylid mites (Chaetodactylidae), intimate associates of long-tongued bees.

16:50~17:00 Discussion & closing

July 16 (WEDNESDAY) ROOM4

#1-02 A genomics view of Plant Mites (I. Host-plant actions and adaptation,
II. Crop pest management)

Organizers : Maria Navajas and Thomas Van Leeuwen

09:45~09:55 Introduction

09:55~10:20 **S1-02-1 Blas Agut, Jordi Gamir, Monica A. Hurtado-Ruiz, Josep A. Jacas, Víctor Flors** :
Tetranychus urticae and Citrus: hijacking or effective defense?

10:20~10:45 **S1-02-2 Rika Ozawa** : Transcriptome analyses of spider mites and predatory mites regarding their temperature and host adaptation.

10:45~11:10 **S1-02-3 Maria J. Navajas** : Adapting to a host plant: trade-offs, genes and mechanisms explaining host range in *Tetranychus urticae*.

11:10~11:30 Coffee break

11:30~11:55 **S1-02-4 Vojislava Grbic** : Reciprocal responses in the interaction between plant and cell-content-feeding chelicerate herbivore.

11:55~12:20 **S1-02-5 Nicky Wybouw** : Cyanide detoxification in mites and moths, a unique metabolic tool transferred from bacteria.

12:20~12:45 **S1-02-6 Mike Grbic** : Whole genome sequencing of spidermites: from genome evolution to biotechnology and new biomaterials.

12:45~14:00 Lunch

14:00~14:25 **S1-02-7 Thomas Van Leeuwen** : Spider mite control and resistance management: does a genome help ?

14:25~14:50 **S1-02-8 Richard M. Clark** : High-resolution genetic mapping with high-throughput sequencing.

14:50~15:15 **S1-02-9 Masahiro Osakabe** : The combination between classical genetic mapping and genomics in the study of acaricide resistance.

15:15~15:40 **S1-02-10 Riga Maria** : Functional analysis of cytochrome P450-based detoxification mechanisms in *Tetranychus urticae*.

- 15:40~16:00 Coffee break
- 16:00~16:25 **S1-02-11 Atsushi Yamamoto** : Status of acaricide resistance and recent topics on genome associated research in Japan.
- 16:25~16:45 Break
- 16:45~17:10 **S1-02-12 Seung-Yoon Ahn** : Bacterial origin of a diverse family of UDP-glycosyltransferase genes in the *Tetranychus urticae* genome.
- 17:10~17:35 **S1-02-13 Sabina Bajda** : Transcriptome profiling of resistant and susceptible strains of the European red mite *Panonychus ulmi* using strand-specific paired-end RNA-seq.
- 17:35~17:45 Discussion/closing

July 17 (THURSDAY) ROOM1

#2-02 Acari-borne cutaneous allergy in Japan

Organizer : Masaru Natsuaki

14:00~14:05 Introduction

14:05~14:25 **S2-02-1 Yosaburo Oikawa** : Mites inducing an atopic dermatitis-like skin lesion in NC mice.

14:25~14:45 **S2-02-2 Tomoyuki Hashimoto** : Anaphylaxis to *Dermatophagoides* mites after ingestion of mite-contaminated food.

14:45~15:05 **S2-02-3 Hiroshi Morita** : Tick bite anaphylaxis in Japan.

15:05~15:25 **S2-02-4 Masaru Natsuaki** : Tick-associated rash illness.

15:25~15:45 **S2-02-5 Yasuo Wada** : Diagnosis and treatment of scabies.

15:45~15:50 Closing remarks

July 17 (THURSDAY) ROOM2

#1-05 Perspectives in mite IPM in agricultural ecosystems under climate change

Organizer : Joon-Ho Lee

14:00~14:05 Introduction

14:05~14:25 **S1-05-1 Joon-Ho Lee** : Predicting changes in population occurrence of *Tetranychus urticae* Koch (Acari: Tetranychidae) and the potential geographic distribution of its predator, *Neoseiulus californicus* (McGregor) (Acari: Phytoseiidae) in Korea with climate change.

14:25~14:45 **S1-05-2 Chuleui Jung** : Climate change and possible change of honeybee and *Varroa* mite interaction.

14:45~15:05 **S1-05-3 Arunkumar Chandrappa Hosamani** : Studies on life and fecundity tables of yellow mite, *Polyphagotarsonemus latus* (Banks) on chilli.

15:05~15:25 **S1-05-4 Sergey Ya. Popov** : Life reproductive tables of the *Tetranychus* spider mite populations under natural conditions.

15:25~15:45 Coffee break

15:45~16:05 **S1-05-5 Sevda Kamburgil** : Effect of temperature on development and fecundity of the predatory mite *Cheletomimus bakeri* (Acari: Cheyletidae) feeding on *Tetranychus cinnabarinus* (Acari: Tetranychidae).

16:05~16:25 **S1-05-6 Mohamed Abdul Haq** : Climatic Upsurge and Population decline in coconut mite - A hope for the future.

16:25~16:45 **S1-05-7 Tomohiro Hori** : Effects of environmental factors on the distribution of predatory mites on plants.

16:45~17:05 Discussion and closing remarks

July 17 (THURSDAY) ROOM3

#3-04 Dispersal in Mites

Organizer : Isabelle Olivieri

14:00~14:30 **S3-04-1 Ophelie Ronce** : Ecological determinants and evolutionary consequences of dispersal in spider mites.

14:30~14:50 **S3-04-2 Masahiro Osakabe** : Aerodynamic advantages of take-off behavior and morphological feature in aerial dispersal of spider mites.

14:50~15:20 **S3-04-3 Maria J. Navajas** : Dispersal pathways of an invasive mite: using genes and models to understand invasion and to predict future spreading of *Tetranychus evansi*.

15:20~15:40 Coffee break

15:40~16:05 **S3-04-4 Ryuji Uesugi** : Difference of gene flow between greenhouse and orchard populations in *Tetranychus urticae* Koch.

16:05~16:35 **S3-04-5 Alexandra Revynthi** : To stay or to disperse: the Milker-Killer dilemma in a predatory mite.

16:35~17:00 **S3-04-6 Hatsune Otsuki** : Lethal and non-lethal effects of predators on spider mite dispersal.

July 17 (THURSDAY) ROOM4

#1-08 Biocontrol of multiple pests with the generalist predator *Amblyseius swirskii*.

Organizer : Arne Janssen and Maurice Sabelis

- 14:00~14:05 Introduction
- 14:05~14:55 **S1-08-1 Maurice Sabelis, Yasuyuki Choh, Yvonne van Houten and Arne Janssen** : Simple criteria for pre-selection of phytoseiid mites as biocontrol agents.
- 14:55~15:25 **S1-08-2 Javier Calvo et al.** : The success history of *Amblyseius swirskii*.
- 15:25~15:55 **S1-08-3 Duc Tung Nguyen et al.** : Liquid and solid artificial diets support the development and reproduction of the predatory mite *Amblyseius swirskii*.
- 15:55~16:25 **S1-08-4 Laura Hewitt, Les Shipp, Rose Buitenhuis and Cynthia Scott-Dupree** : Seasonal climatic variations influence the efficacy of predatory mites used for control of western flower thrips in greenhouse ornamental crops.
- 16:25~16:45 **S1-08-5 Julliette Pijnaker et al.** : Predatory mites as a first line of defense.
- 16:45~17:15 **S1-08-6 Julie Faucher Delisle, Les Shipp and Jacques Brodeur** : Influence of supplemental food on the biology and control efficacy of two predatory mites, *Amblyseius swirskii* and *Neoseiulus cucumeris* (Acari: Phytoseiidae) on western flower thrips.
- 17:15~17:45 **S1-08-7 Karen Munoz et al.** : Apparent competition between an aboveground-herbivore pest and belowground litter-inhabiting detritivores results in better biological control.
- 17:45~17:55 Discussion and closing remarks

July 18 (FRIDAY) ROOM3

#2-03 Acari-borne infectious diseases in Far East

Organizer : Shuji Ando

09:00~09:05 Introduction

09:05~09:30 **S2-03-3 Naota Monma et al.** : Epidemiology of
Tsutsugamushi diseases in the mainland of Japan.

09:30~09:55 **S2-03-4 Tomokazu Kitano** : Characterization of *Orientia*
tsutsugamushi Isolated in Ikema island.

09:55~10:20 **S2-03-2 Norio Ohashi et al.** : Tick-associated
Anaplasmataceae pathogens in Japan.

10:20~10:45 **S2-03-1 Shuji Ando et al.** : Rickettsial and other
pathogens in ticks, Japan.

10:45~10:50 Closing remarks