

Symposium Schedule

Start		Room
Thursday: 9 October 2008		
08:00	Symposium Registration Display	Lobby Saturn & Mars
09:00	Opening Ceremony	Grand A
	Scientific Posters	
	Opening Address (Mun Il Ryoo: President, The Korean Society of Applied Entomology)	
	Welcome Address (Hiroshi Amano: President, The Acarological Society of Japan)	
	Congratulation Speech (Eun-Gi Cho: Director general, NIAST, RDA)	
	Congratulation Speech (Sang Seung Baek: Mayor of Gyeongju)	
09:50	Official Photo	Grand A
10:00	Plenary Lecture	Grand A
	Dr. Gösta Nachman (Denmark) Chair: Dr. Hiroshi Amano (Japan)	
11:00	Society Meetings	Grand A Grand B
	The Korean Society of Applied Entomology The Acarological Society of Japan	
12:00	Lunch Break & Posters	Saturn & Mars
13:00	Oral Presentations on Mites	Grand A
19:30	Official Reception	Grand A&B
Friday: 10 October 2008		
09:00	Plenary Lecture	Grand A
	Dr. Peter Schausberger (Austria) Chair: Dr. Joon-Ho Lee (Korea)	
10:00	Oral Presentations on Mites	Grand A
	Workshop of Whitefly	Grand B
12:00	Lunch Break & Posters	Saturn & Mars
13:00	Oral Presentations on Mites	Grand A
	Workshop of Whitefly	Grand B
19:30	Symposium Banquet Party	Grand A&B
Saturday: 11 October 2008		
09:00	Optional Sampling Tour & Business Meetings	Gyeongju Area
12:00	Closing	

Plenary Lecture

- Dr. Gösta Nachman (Denmark)
Title : Using models to bridge the gap between petri-dish experiments and field data: Biological control of spider mites as a case-study.
- Dr. Peter Schausberger (Austria)
Title : Recognition systems in a mite-dominated agricultural community.

Symposium Programme

●●● SECTION 1 Mites Symposium

► 09 October 2008

Symposium Session			Invasive Species	Room No.
Session Organizers			Ki-Jeong Hong (Korea) Koichi Goka (Japan)	Grand A
Order	Start	Abstract No.	Presentation Title & Authors	Presenting Author
1	13:00	S001	Distribution and control strategies of honeybee parasitic mites, <i>Varroa destructor</i> Anderson & Trueman, in South Korea <i>Myeong-Lyeol Lee, Yong Soo Choi, Won Tae Kim</i>	Myeong-Lyeol Lee
2	13:20	S002	The beetle commercialization in Japan will destroy the evolutionary history of mites <i>Koichi Goka, Kimiko Okabe</i>	Koichi Goka
3	13:40	S003	The reptile associated ticks and <i>Borrelia</i> from imported reptiles <i>Ai Takano, Hiroki Kawabata, Haruo Watanabe, Tei-ichiro Shino, Koichi Goka, Yumi Une, Hiromi Fujita</i>	Ai Takano
4	14:00	S004	The PRA and using status of foreign predatory mite species in Korea <i>Heung-Sik Lee, Jeong-Woo Suh</i>	Heung-Sik Lee
	14:20		Coffee Break	

Symposium Session			Agricultural Acarology	Room No.
Session Organizers			Soon-Won Lee (Korea) Shingo Toyoshima (Japan)	Grand A
Order	Start	Abstract No.	Presentation Title & Authors	Presenting Author
1	14:40	S005	Molting inhibition of <i>Panonychus citri</i> (McGregor) (Acari: Tetranychidae) appears to be caused by an acaricide rather than a natural product <i>Tetsuo Gotoh, Tomoko Korenaga, Satomi Ikejima, Tsutomu Hoshino</i>	Tetsuo Gotoh
2	14:55	S006	Insecticide resistance analysis of two spotted spider mite (<i>Tetranychus urticae</i>) in peach, apple and strawberry orchards in Korea <i>Si-Woo Lee, Byeong-Ryeol Choi, Hyeong-Man Park</i>	Si-Woo Lee
3	15:10	S007	Development of microsatellite DNA markers and measurement of genetic diversity in <i>Neoseiulus womersleyi</i> (Schicha) <i>Norihide Hinomoto, Taro Maeda</i>	Norihide Hinomoto
4	15:25	S008	Monocrotophos resistance in the two-spotted spider mite, <i>Tetranychus urticae</i> Koch, mediated by point mutation of acetylcholinesterase <i>Deok Ho Kwon, Si Hyeock Lee</i>	Deok Ho Kwon
5	15:40	S009	Deleterious effects of ultraviolet-B radiation on herbivorous spider mites and predaceous phytoseiid mites <i>Masahiro Osakabe, Keiko Ohtsuka</i>	Masahiro Osakabe
6	15:55	S010	Resistance to UV radiation in the two-spotted spider mite, <i>Tetranychus urticae</i> <i>Takeshi Suzuki, Makio Takeda</i>	Takeshi Suzuki
7	16:10	S011	Optimum release strategies for <i>Phytoseiulus persimilis</i> to control <i>Tetranychus urticae</i> on forcing strawberry <i>Yong-Heon Kim, Hwang-Yong Kim, Jeong-Hwan Kim, Dae-Hong Lee, Young-Nam Youn</i>	Yong-Heon Kim
8	16:25	S012	Seasonal occurrence of phytoseiid mites on windbreaks of <i>Podocarpus macrophyllus</i> surrounding citrus orchards <i>Hidenari Kishimoto, Yoshio Ohira</i>	Hidenari Kishimoto

International Symposium on Mites & Whitefly

Symposium Session			Agricultural Acarology	Room No.
Session Organizers			Soon-Won Lee (Korea) Shingo Toyoshima (Japan)	Grand A
Order	Start	Abstract No.	Presentation Title & Authors	Presenting Author
9	16:40	S013	Occurrence of <i>Neoseiulus californicus</i> (Acari: Phytoseiidae) and biological control of citrus red mite, <i>Panonychus citri</i> (Acari: Tetranychidae) in Jeju citrus orchards <i>Kyung San Choi, Dong Hwan Kim, Chuleui Jung, Ki Sang Lee, Seung Jong Jeon</i>	Kyung San Choi
10	16:55	S014	Historical changes of spider mite occurrence for recent 16 years in Korean apple orchards <i>Kyung Hee Choi, Soon Won Lee, Dong Hyunk Lee, Dong Ah Kim, Chuleui Jung</i>	Kyung Hee Choi
11	17:10	S015	Overwintering sites of <i>Neoseiulus californicus</i> (McGregor) (Acari: Phytoseiidae) in citrus orchards and possible factor increasing winter survival of <i>N. californicus</i> in Korea <i>Mitsuhiro Kawashima, Chuleui Jung</i>	Mitsuhiro Kawashima
12	17:25	S016	Temperature effects on life-history traits of <i>Neoseiulus californicus</i> (McGregor) (Acari: Phytoseiidae) when feeding on <i>Panonychus ulmi</i> (Koch) as prey <i>Hasan Fuad El Taj, Chuleui Jung</i>	Hasan Fuad El Taj

► 10 October 2008

Symposium Session			Soil Acarology	Room No.
Session Organizers			Chuleui Jung (Korea) Kenji Fukuyama (Japan)	Grand A
Order	Start	Abstract No.	Presentation Title & Authors	Presenting Author
1	10:00	S017	Soil gamasid mites: their diversity and availability as bioindicators <i>Gen Takaku, Minako Takagi, Ayaka Fukuda, Mitsuo Sogabe</i>	Gen Takaku
2	10:20	S018	Gamasid mite assemblage on mountain fire sites <i>Chuleui Jung, Tomasz Marquardt, Slawomir Kaczmarek, Hoonbok Yi</i>	Chuleui Jung
3	10:40	S019	Comparative study among Asian Oribatid Fauna. - Is oribatid fauna rich in tropical zone? - <i>Kenji Fukuyama</i>	Kenji Fukuyama
4	11:00	S020	Post-fire assemblage of oribatid mites (Acari: Oribatida) from mountain sites with differential burn severities in Samcheok, Korea <i>Jiwon Kim, Chuleui Jung</i>	Jiwon Kim

Symposium Session			Ecology, Taxonomy & Evolution of Mites	Room No.
Session Organizers			Dong-Soon Kim (Korea) Kimiko Okabe (Japan)	Grand A
Order	Start	Abstract No.	Presentation Title & Authors	Presenting Author
1	11:20	S021	Current status of taxonomic study on Korean Eriophyoid mites <i>Jong-Ho Lee, Seung-Hwan Lee</i>	Jong-Ho Lee
2	11:40	S022	An undescribed species of <i>Pelzneria</i> (Acari, Histiostomatidae) phoretic on the burying beetle, <i>Nicrophorus concolor</i> Kraatz (Coleoptera, Silphidae) in Asia <i>Kazumi Tagami, Kazuyoshi Kurosa</i>	Kazumi Tagami
	12:00		Lunch Break & Posters	
3	13:00	S023	A mite <i>Ensliniella parasitica</i> parasitic to as well as a bodyguard of a host wasp, <i>Allodynerus delphinalis</i> <i>Kimiko Okabe, Shun'ichi Makino</i>	Kimiko Okabe
4	13:20	S024	Role of excreta in predator avoidance by the Kanzawa spider mite, <i>Tetranychus kanzawai</i> (Acari: Tetranychidae) <i>Keiko Oku</i>	Keiko Oku

Symposium Session			Ecology, Taxonomy & Evolution of Mites	Room No.
Session Organizers			Dong-Soon Kim (Korea) Kimiko Okabe (Japan)	Grand A
Order	Start	Abstract No.	Presentation Title & Authors	Presenting Author
5	13:40	S025	Does red pigment protect the citrus red mite eggs from UV damage? <i>Midori Fukaya, Masahiro Osakabe</i>	Midori Fukaya
6	14:00	S026	Environmental tolerance of <i>Neoseiulus womersleyi</i> , <i>Neoseiulus californicus</i> and <i>Phytoseiulus persimilis</i> (Phytoseiidae) based on egg hatching and immature survival: implications for biological control of spider mites <i>Chuleui Jung, Hasan El Taj</i>	Chuleui Jung
7	14:20	S027	Population dynamics of <i>Tetranychus urticae</i> and its predatory mites, <i>Neoseiulus californicus</i> and <i>Phytoseiulus persimilis</i> , on connected strawberry leaf arena <i>JeongJoon Ahn, Joon-Ho Lee</i>	JeongJoon Ahn
8	14:40	S028	Factors affecting the changes in species composition between <i>Tetranychus urticae</i> and <i>Panonychus ulmi</i> (Acari: Tetranychidae) in orchards: Hypothesis and case studies <i>Dong-Soon Kim, Joon-Ho Lee</i>	Dong-Soon Kim
	15:00		Coffee Break	

Symposium Session			Medical & Veterinary Acarology	Room No.
Session Organizers			Won-Ja Lee (Korea) Kozo Fujisaki (Japan)	Grand A
Order	Start	Abstract No.	Presentation Title & Authors	Presenting Author
1	15:20	S029	Tick-borne disease surveillance in the US military in Korea <i>Terry A. Klein, Heung-Chul Kim, William J. Sames</i>	Terry A. Klein
2	15:40	S030	Ticks and tick-borne pathogens: Public health <i>Joon-Seok Chae</i>	Joon-Seok Chae
3	16:00	S031	Chiggers of medical importance in Korea <i>In-Yong Lee</i>	In-Yong Lee
4	16:20	S032	Characterization of autophagy-related gene homologues from a three host tick, <i>Haemaphysalis longicornis</i> <i>Rika Umemiya-Shirafuji, Tomohide Matsuo, Damdinsuren Boldbaatar, Min Liao, Banzragch Battur, Md. Morshedur Rahman, Kozo Fujisaki</i>	Rika Umemiya-Shirafuji
5	16:40	S033	Structure prediction and cytolytic activity of a potent antimicrobial motif derived from longicin, a defesin-like peptide in the tick <i>Haemaphysalis longicornis</i> <i>Morshedur Rahman, Damdinsuren Boldbaatar, Min Liao, Rika Umemiya-Shirafuji, Naotoshi Tsuji, Tetsuya Tanaka, Satoshi Taharaguchi, Kozo Fujisaki</i>	Morshedur Rahman
6	17:00	S034	GATA translation in tick gene activation: identification of GATA transcription factor from the hard tick <i>Haemaphysalis longicornis</i> <i>Damdinsuren Boldbaatar, Banzragch Battur, Rika Umemiya-Shirafuji, Min Liao, Tetsuya Tanaka, Kozo Fujisaki</i>	Damdinsuren Boldbaatar
7	17:20	S035	Hemalin, a thrombin inhibitor isolated from the midgut EST database of hard tick <i>Haemaphysalis longicornis</i> <i>Min Liao, Jinlin Zhou, Haiyan Gong, Damdinsuren Boldbaatar, Rika Umemiya-Shirafuji, Banzragch Battur, Jianbao Dong, Yoshifumi Nishikawa, Myungjo You, Kozo Fujisaki</i>	Min Liao
8	17:40	S036	Allergenicity of simple chemicals in house dust mites detected by patch tests <i>Hideo Nakayama, Akiko Kumei, Naoki Mori, Yasumasa Kuwahara</i>	Hideo Nakayama
9	18:00	S037	Analysis of the vitellogenin gene from the soft tick <i>Ornithodoros moubata</i> <i>Mari Horigane, DeMar Taylor</i>	Mari Horigane

●●● SECTION 2 Whitefly Workshop

► 10 October 2008

Symposium Session			Whitely Workshop	Room No.
Session Organizers			Hyeong-Man Park (Korea)	Grand B
Order	Start	Abstract No.	Presentation Title & Authors	Presenting Author
1	10:00	W001	Management of <i>Bemisia</i> whitefly and its virus transmission in Japan <i>Ken-ichiro Honda</i>	Ken-ichiro Honda
2	10:40	W002	Migration and local dynamics of <i>Trialeurodes vaporariorum</i> in bean crops <i>Lisbeth Riis, Gösta Nachman</i>	Gösta Nachman
3	11:20	W003	Occurrence of <i>Bemisia tabaci</i> and its vectored virus in Korea <i>Minho Lee, Ki-Baik Uhm, Sunyoung Lee, Heeyong Park, Murad Ghanim</i>	Minho Lee
	12:00	Lunch Break & Posters		
4	13:00	W004	Effects of the acquisition of plant pathogenic virus on the gene expression of the whitefly vector and its endosymbionts <i>Kyeong-Yeoll Lee, Woo-Geun Song, Sukchan Lee, Eunseok Choi</i>	Kyeong-Yeoll Lee
5	13:30	W005	Development of agrochemicals against sweet potato whitefly according to the critical customer requirement. <i>Kyoung-Sung Kim</i>	Kyoung-Sung Kim
6	14:00	W006	Biological control of <i>Bemisia tabaci</i> in Korea: Status and prospects <i>Hwang-Yong Kim, Jeong-Hwan Kim, Yong-Heon Kim, Yong-Hwi Lee</i>	Hwang-Yong Kim
7	14:30	W007	Developmental and ovipositional characteristics of <i>Bemisia tabaci</i> on three different host plants <i>Eun Jung Han, Byeong-Ryeol Choi, Joon Ho Lee</i>	Eun Jung Han
8	15:00	W008	Selecting effective chemical control agents of <i>Bemisia tabaci</i> biotype B and Q <i>Chuleui Jung, Woong Park, Si-Yong Kim, Jin Ju Kim, Hyung-Man Park</i>	Chuleui Jung

Contents

●●●● Plenary Lecture

- PL01** Using models to bridge the gap between petri-dish experiments and field data: Biological control of spider mites as a case-study 3
Gösta Nachman
- PL02** Recognition systems in a mite-dominated agricultural community 5
Peter Schausberger

●●●● SECTION 1 Mites Symposium

- S001** Distribution and control strategies of honeybee parasitic mites, *Varroa destructor* Anderson & Trueman, in South Korea 11
Myeong-Lyeol Lee, Yong Soo Choi, Won Tae Kim
- S002** The beetle commercialization in Japan will destroy the evolutionary history of mites 13
Koichi Goka, Kimiko Okabe
- S003** The reptile associated ticks and *Borrelia* from imported reptiles 17
Ai Takano, Hiroki Kawabata, Haruo Watanabe, Tei-ichiro Shino, Koichi Goka, Yumi Une, Hiromi Fujita
- S004** The PRA and using status of foreign predatory mite species in Korea 19
Heung-Sik Lee, Jeong-Woo Suh
- S005** Molting inhibition of *Panonychus citri* (McGregor) (Acari: Tetranychidae) appears to be caused by an acaricide rather than a natural product 25
Tetsuo Gotoh, Tomoko Korenaga, Satomi Ikejima, Tsutomu Hoshino
- S006** Insecticide resistance analysis of two spotted spider mite (*Tetranychus urticae*) in peach, apple and strawberry orchards in Korea 27
Siwoo Lee, Byeongryeol Choi, Hyeongman Park
- S007** Development of microsatellite DNA markers and measurement of genetic diversity in *Neoseiulus womersleyi* (Schicha) 29
Norihide Hinomoto, Taro Maeda

S008	Monocrotophos resistance in the two-spotted spider mite, <i>Tetranychus urticae</i> Koch, mediated by point mutation of acetylcholinesterase 31 Deok Ho Kwon, Si Hyeock Lee
S009	Deleterious effects of ultraviolet-B radiation on herbivorous spider mites and predaceous phytoseiid mites 33 Masahiro Osakabe, Keiko Ohtsuka
S010	Resistance to UV radiation in the two-spotted spider mite, <i>Tetranychus urticae</i> 35 Takeshi Suzuki, Makio Takeda
S011	Optimum release strategies for <i>Phytoseiulus persimilis</i> to control <i>Tetranychus urticae</i> on forcing strawberry 37 Yong-Heon Kim, Hwang-Yong Kim, Jeong-Hwan Kim, Dae-Hong Lee, Young-Nam Youn
S012	Seasonal occurrence of phytoseiid mites on windbreaks of <i>Podocarpus macrophyllus</i> surrounding citrus orchards 39 Hidenari Kishimoto, Yoshio Ohira
S013	Occurrence of <i>Neoseiulus californicus</i> (Acari: Phytoseiidae) and biological control of citrus red mite, <i>Panonychus citri</i> (Acari: Tetranychidae) in Jeju citrus orchards 41 Kyung San Choi, Dong Hwan Kim, Chuleui Jung, Ki Sang Lee, Seung Jong Jeon
S014	Historical changes of spider mite occurrence for recent 16 years in Korean apple orchards 43 Kyung Hee Choi, Soon Won Lee, Dong Hyunk Lee, Dong Ah Kim, Chuleui Jung
S015	Overwintering sites of <i>Neoseiulus californicus</i> (McGregor) (Acari: Phytoseiidae) in citrus orchards and possible factor increasing winter survival of <i>N. californicus</i> in Korea 45 Mitsuhiro Kawashima, Chuleui Jung
S016	Temperature effects on life-history traits of <i>Neoseiulus californicus</i> (McGregor) (Acari: Phytoseiidae) when feeding on <i>Panonychus ulmi</i> (Koch) as prey 47 Hasan Fuad El Taj, Chuleui Jung

S017	Soil gamasid mites: their diversity and availability as bioindicators 49 Gen Takaku, Minako Takagi, Ayaka Fukuda, Mitsuo Sogabe
S018	Gamasid mite assemblage on mountain fire sites 51 Chuleui Jung, Tomasz Marquardt, Slawomir Kaczmarek, Hoonbok Yi
S019	Comparative study among Asian Oribatid Fauna. -Is oribatid fauna rich in tropical zone?- 55 Kenji Fukuyama
S020	Post-fire assemblage of oribatid mites (Acari: Oribatida) from mountain sites with differential burn severities in Samcheok, Korea 57 Jiwon Kim, Chuleui Jung
S021	Current status of taxonomic study on Korean Eriophyoid mites 59 Jong-Ho Lee, Seung-Hwan Lee
S022	An undescribed species of <i>Pelzneria</i> (Acari, Histiostomatidae) phoretic on the burying beetle, <i>Nicrophorus concolor</i> Kraatz (Coleoptera, Silphidae) in Asia 61 Kazumi Tagami, Kazuyoshi Kurosa
S023	A mite <i>Ensliniella parasitica</i> parasitic to as well as a bodyguard of a host wasp, <i>Allodynerus delphinalis</i> 63 Kimiko Okabe, Shun'ichi Makino
S024	Role of excreta in predator avoidance by the Kanzawa spider mite, <i>Tetranychus kanzawai</i> (Acari: Tetranychidae) 65 Keiko Oku
S025	Does red pigment protect the citrus red mite eggs from UV damage? 67 Midori Fukaya, Masahiro Osakabe
S026	Environmental tolerance of <i>Neoseiulus womersleyi</i> , <i>Neoseiulus californicus</i> and <i>Phytoseiulus persimilis</i> (Phytoseiidae) based on egg hatching and immature survival: implications for biological control of spider mites 69 Chuleui Jung, Hasan El Taj
S027	Population dynamics of <i>Tetranychus urticae</i> and its predatory mites, <i>Neoseiulus californicus</i> and <i>Phytoseiulus persimilis</i> , on connected strawberry leaf arena 73 JeongJoon Ahn, Joon-Ho Lee

S028	Factors affecting the changes in species composition between <i>Tetranychus urticae</i> and <i>Panonychus ulmi</i> (Acari: Tetranychidae) in orchards: Hypothesis and case studies 75 Dong-Soon Kim, Joon-Ho Lee
S029	Tick-borne disease surveillance in the US military in Korea 83 Terry A. Klein, Heung-Chul Kim, William J. Sames
S030	Ticks and tick-borne pathogens: Public health 91 Joon-Seok Chae
S031	Chiggers of medical importance in Korea 125 In-Yong Lee
S032	Characterization of autophagy-related gene homologues from a three host tick, <i>Haemaphysalis longicornis</i> 133 Rika Umemiya-Shirafuji, Tomohide Matsuo, Damdinsuren Boldbaatar, Min Liao, Banzragch Battur, Md. Morshedur Rahman, Kozo Fujisaki
S033	Structure prediction and cytolytic activity of a potent antimicrobial motif derived from longicin, a defesin-like peptide in the tick <i>Haemaphysalis longicornis</i> ... 135 Morshedur Rahman, Damdinsuren Boldbaatar, Min Liao, Rika Umemiya-Shirafuji, Naotoshi Tsuji, Tetsuya Tanaka, Satoshi Taharaguchi, Kozo Fujisaki
S034	GATA translation in tick gene activation: identification of GATA transcription factor from the hard tick <i>Haemaphysalis longicornis</i> 137 Damdinsuren Boldbaatar, Banzragch Battur, Rika Umemiya-Shirafuji, Min Liao, Tetsuya Tanaka, Kozo Fujisaki
S035	Hemalin, a thrombin inhibitor isolated from the midgut EST database of hard tick <i>Haemaphysalis longicornis</i> 139 Min Liao, Jinlin Zhou, Haiyan Gong, Damdinsuren Boldbaatar, Rika Umemiya-Shirafuji, Banzragch Battur, Jianbao Dong, Yoshifumi Nishikawa, Myungjo You, Kozo Fujisaki
S036	Allergenicity of simple chemicals in house dust mites detected by patch tests 141 Hideo Nakayama, Akiko Kumei, Naoki Mori, Yasumasa Kuwahara
S037	Analysis of the vitellogenin gene from the soft tick <i>Ornithodoros moubata</i> ... 143 Mari Horigane, DeMar Taylor

●●● SECTION 2 Whitefly Workshop

W001	Management of <i>Bemisia</i> whitefly and its virus transmission in Japan 147 Ken-Ichiro Honda
W002	Migration and local dynamics of <i>Trialeurodes vaporariorum</i> in bean crops ... 149 Lisbeth Riis, Gösta Nachman
W003	Occurrence of <i>Bemisia tabaci</i> and its vectored virus in Korea 151 Minho Lee, Ki-Baik Uhm, Sunyoung Lee, Heeyong Park, Murad Ghanim
W004	Effects of the acquisition of plant pathogenic virus on the gene expression of the whitefly vector and its endosymbionts 153 Kyeong-Yeoll Lee, Woo-Geun Song, Sukchan Lee, Eunseok Choi
W005	Developments of agrochemicals against sweet potato whitefly according to the critical customer requirement 155 Kyoung-Sung Kim
W006	Biological control of <i>Bemisia tabaci</i> in Korea: Status and prospects 157 Hwang-Yong Kim, Jeong-Hwan Kim, Yong-Heon Kim, Yong-Hwi Lee
W007	Developmental and ovipositional characteristics of <i>Bemisia tabaci</i> on three different host plants 159 Eun Jung Han, Byeong-Ryeol Choi, Joon Ho Lee
W008	Selecting effective chemical control agents of <i>Bemisia tabaci</i> biotype B and Q 163 Chuleui Jung, Woong Park, Si-Yong Kim, Jin Ju Kim, Hyung-Man Park

●●●● Poster Presentation

A Program Director : Byung Rae Jin

●●●● Acarology

- P001** Residual contact bioassay for the rapid diagnosis of acaricide resistance in *Tetranychus urticae* 171
Deok Ho Kwon, Jeong Joon Ahn, Joon Ho Lee, Si Hyeock Lee
- P002** Two spotted mite, *Tetranychus urticae* Koch, emerged as a new pest in persimmon orchards and approaches to their control 173
Bu-Keun Chung, Mitsuhiro Kawashima, Chuleui Jung
- P003** Susceptibility of three *Tetranychus takafujii* populations and six *T. evansi* populations from abroad to eleven acaricides 175
Satoshi Fujiwara, Yasuki Kitashima, Tetsuo Gotoh
- P004** Performance of seventeen tetranychid mite species and four predators on borage and strawberry 177
Ghada Mohyei Ali El-Shafei, Yasuki Kitashima, Tetsuo Gotoh
- P005** Effectiveness of second mating in the two-spotted spider mite 179
Akimasa Morita, Yasuki Kitashima, Tetsuo Gotoh
- P006** Development and reproduction of a Japanese *Tetranychus takafujii* population and six foreign *T. evansi* populations 181
Yuma Ohno, Noriaki Sugimoto, Yasuki Kitashima, Tetsuo Gotoh
- P007** Effect of temperature on some aspects of mating behavior and reproduction of a predatory mite, *Neoseiulus californicus* (McGregor) (Acari: Phytoseiidae) 183
Thao Thi Phuong Nguyen, Hiroshi Amano
- P008** Effect of starving treatment on gravid females of *Neoseiulus californicus* (Acari: Phytoseiidae) 185
Shingo Toyoshima
- P009** Reproductive rate of several oribatid mites from *Sphagnum mires* 187
Gen-Ichi Kuriki

P010	Effect of invasion of broad leaved tree effect on soil oribatid mites in Larch (<i>Larix kaempferi</i>) plantation 189 Aino Ota, Motohiro Hasegawa, Masamichi T. Ito
P011	The rich acarofauna on <i>Viburnum erosum</i> var. <i>punctatum</i> 191 Masaaki Sudo, Sachiko Nishida, Takao Itioka
P012	Phylogenetic analysis of <i>Stigmaeopsis</i> spider mites (Acari: Tetranychidae) on Japanese silver grass and bamboos 193 Katsura Ito, Tatsuya Fukuda, J. Yokoyama
P013	Phylogenetic relationship of marine halacarids inferred from DNA analysis of 28S ribosomal RNA gene 195 Hiroko Meguro, Hiroshi Abe, Masahiro Iwasa
P014	Host and site preferences of water mite larvae attaching to aquatic insects .. 197 Takuya Nagasawa, Hiroshi Abe
P015	Induction of allergic contact dermatitis by astigmatid mite-derived monoterpene, α -acaridial 199 Toshio Sasai, Yunosuke Hirano, Sayaka Maeda, Isamu Matsunaga, Atsushi Otsuka, Daisuke Morita, Ritsuo Nishida, Hideo Nakayama, Yasumasa Kuwahara, Masahiko Sugita, Naoki Mori

Contents

A Program Director : Byung Rae Jin

●●● Taxonomy & Morphology

Section Chairman : Ki Jeong Hong

- P016** Eight species of the tribe Eucosmini (Lepidoptera, Tortricidae, Olethreutinae) new to North Korea 3
Bong-Kyu Byun and Bong-Woo Lee
- P017** Three newly recorded species of the family Gracillariidae (Lepidoptera) from Korea 4
Bong-Woo Lee, Bong-Kyu Byun, Shin-Young Park, Doo-Hee Kwon, So-Ra Kim, Kyu-Tek Park
- P018** Taxonomic study of the genus *Hellinsia* Tutt (Lepidoptera, Pterophoridae) in the Korean Peninsula 5
So-Ra Kim, Bong-Kyu Byun, Kyu-Tek Park
- P019** A new species of the genus *Adoxophyes* (Lepidoptera: Tortricidae) intercepted from the sweet cherry imported from China 6
Young Mi Park, Deuk-Soo Choi
- P020** The species of genus *Cydia* Hübner (Lepidoptera, Tortricidae, Olethreutinae) from Korea 7
Do-Young Chae, Yang-Seop Bae
- P021** Comparison of the morphological clustering and molecular phylogeny of the tribe Aphidini (Hemiptera: Aphididae) 8
Hyojoong Kim, Seunghwan Lee
- P022** Three new records of the family Miridae (Hemiptera: Heteroptera) from Korea 9
Jongwoon Seong, Gwan-Seok Lee
- P023** *Camptomyia heterobia*. (Diptera: Cecidomyiidae), a new pest on shiitake mushroom 10
Seungkwan Shin, Heungsik Lee, Seunghwan Lee

P024	A new species of the genus <i>Odontepyris</i> , an ectoparasitoid on the larvae of <i>Telorta divergens</i> (Lepidoptera: Noctuidae) 11 Jongok Lim, Sangchul Shin, Seunghwan Lee
P025	Simple intra-species comparison of <i>Sclerodermus harmandi</i> (Hymenoptera : Bethyridae) using genomic and mitochondrial gene fragements 12 Chansik Jung, Joong Nam Kang, Jong Ok Lim, Sang Hyun Koh, Yeong Jin Chung, Sang Chul Shin
Section Chairman : Bong Kyu Byun	
P026	Complete nucleotide sequence and organization of the mitochondrial genome of the brown-marmorated stink bug <i>Halyomorpha halys</i> (Hemiptera: Pentatomidae) 13 Wonhoon Lee, Joongnam Kang, Chansik Jung, Seunghwan Lee
P027	The discrimination of domestic silkworm strains using simple-sequence loci .. 14 Kee-Young Kim, I-Yoen Jung, Yong-Soon Kim, Kang-Sun Ryu, Iksoo Kim, Byung-Rae Jin, Sang-Mong Lee, Pil-Don Kang
P028	Tubercles patterns of the genus <i>Linaeidea</i> (Coleoptera: Chrysomelidae) from Korea 15 Jinyoung Park, Hee Wook Cho, Jong Eun Lee
P029	Complete mitochondrial genome sequence of the red-spotted apollo butterfly, <i>Parnassius bremeri</i> (Lepidoptera: Papilionidae) 16 Man Il Kim, Heon Cheon Jeong, Byung Rae Jin, Iksoo Kim
P030	The mitochondrial genome of the jewel beetle, <i>Chrysochroa fulgidissima</i> (Coleoptera: Buprestidae): Complete DNA sequence, genome organization, and phylogenetic analysis with other coleopteran insects 17 Mee Yeon Hong, Heon Cheon Jeong, Hyung Uk Jeong, Sang Hyun Lee, Iksoo Kim
P031	Complete mitochondrial genome sequence of the yellow-spotted long-horned beetle <i>Psacotheahilaris</i> (Coleoptera: Cerambycidae) 18 Mee Yeon Hong, Hyun Hwak Im, Ki-Gyoung Kim, Iksoo Kim
P032	Naming of <i>Lycorma delicatula</i> 꽃매미 & <i>Limois emelianovi</i> 희조꽃매미 (Hemiptera: Auchenorrhyncha: Fulgoridae) 19 Jung Min Han, Hyojoong Kim, Eun Ji Lim, Yong-Jung Kwon, Seunghwan Lee, Soowon Cho

- P033** *Semidalis aleyrodiformis* (Neuroptera: Coniopterygidae), referred once in 1978 and away until now in Korea 20
 SI Ki Kim, Eun-Sol Lee, Seong Kyun Lee, Jung Min Han, Soowon Cho
- P034** Geographic variation of the bumble bee, *Bombus ardens* (Hymenoptera: Apidae) 21
 Min Jee Kim, Hyung Joo Yoon, Hyung Wuk Jeong, Hyun Hwak Im, Hwa Young Kim, Iksoo Kim
- P035** The mitochondrial genome of the Japanese oak silkworm, *Antheraea yamamai* (Lepidoptera: Saturniidae): Complete DNA sequence, genome organization, and phylogenetic analysis with other lepidopteran insects 22
 Seong Ryeol Kim, Man Il Kim, Mee Yeon Hong, Kee Young Kim, Pil Don Kang, Jae Sam Hwang, Yeon Soo Han, Iksoo Kim
- P036** Mitochondrial DNA sequence variation of the swallowtail butterfly, *Papilioxuthus* L. (Lepidoptera: Papilionidae), and the cabbage butterfly, *Pieris rapae* L. (Lepidoptera: Pieridae) 23
 Heon Cheon Jeong, Jung A Kim, Hyun Hwak Im, Hyung Uk Jeong, Mee Yeon Hong, Jong Eun Lee, Yeon Soo Han, Iksoo Kim

●●● **Physiology, Genetics & Chemical Ecology**

Section Chairman : **Jin Kyo Jung**

- P037** Factors influencing the development and diapause in the large copper butterfly, *Lycaena dispar* (Lepidoptera : Lycaenidae) 24
 Seong Hyun Kim, Nam Jung Kim, Nan Hee An, Seong Jin Hong, Kwang Youl Seol
- P038** Optimal conditions for cytochrome P450 induction in *Plutella xylostella* (Lepidoptera: Plutellidae) 25
 Ji Hyeong Baek, Si Hyeock Lee
- P039** Effect of genetically modified pepper plant on attraction responses of *Aphis gossypii* and its parasitoid wasp, *Aphidius colemani*, in relation to *Cucumber mosaic virus* infection 26
 Yurim Jeong, Minhoo Lee, Jum-Rae Cho, Man-Young Choi, Yong-Shik Chun, Mun-Il Ryoo, Yong-Man Yu
- P040** Field test of the synthetic sex pheromone in the rice green caterpillar, *Naranga aenescens* and the rice leaf roller, *Cnaphalocrocis medinalis* 27
 Ki Hong Yum, Jum Rae Cho, Minhoo Lee, Young Nam Youn

P041	Differences in sex pheromone communication systems of three species in genus <i>Adoxophyes</i> 28 Chang Yeol Yang, Kyeong Sik Han, Heung Yong Jeon, Taek Jun Kang
P042	Analysis of different elytra color patterns using AFLP markers in Asian lady beetles, <i>Harmonia axiridis</i> 29 Dae Hong Lee, Eun Jin Kang, Hee Bong Seok, Chang Wook Jo, Cho Rong Park, Mi Ja Seo, Yong Man Yu, Young Nam Youn
P043	Survivorship of the bean bug, <i>Riptortus clavatus</i> , fed on seed extract fractions of a mungbean variety 30 Jin Kyo Jung, Bo-Yoon Seo, Jung-Kyung Moon, Ja-Hwan Ku
P044	Molecular cloning and analysis of the hemocytic STAT gene from <i>Hyphantria cunea</i> 31 Hong Ja Kim, Young Jin Kang, Yong Min Kwon, Yong Il Kim, Byung Rae Jin, Hyang Mi Cheon, Nam Gyu Ha, Sook Jae Seo
P045	Comparison of MnSOD and Cu/ZnSOD induction by various stresses from <i>Hyphantria cunea</i> 32 Yong Il Kim, Hong Ja Kim, Yong Min Kwon, Byung Rae Jin, Young Jin Kang, Hyang Mi Cheon, Nam Gyu Ha, Sook Jae Seo
P046	Lingocellulose degrading activity in digestive tract of <i>Trypoxylus [Allomyrina] dichotoma</i> 33 No-Joong Park, Hee Kyung Lim, In Taek Hwang

●●● Insect Ecology & Behavior

Section Chairman : **Jong Dae Park**

P047	Artificial multiplication of the black soldier fly, <i>Hermetia illucens</i> (Diptera: Stratmyidae) 34 Jong-Gill Kim, Young-Cheol Choi, Ji-Young Choi, Won-Tae Kim, Gil-Sang Jeong, Sock-Jo Hwang
P048	Estimating optimum rate of chrysanthemum flower model traps to manage <i>Frankliniella intonsa</i> in strawberry greenhouse 35 Bishwo P. Mainali, Un Taek Lim

P049	Fundamental characteristics of <i>Propylea japonica</i> (Coleoptera: Coccinellidae) for mass rearing system 36 Jin Gu Lee, Sun Sung Hong, Jin Young Kim, Hyun Ju Lee, Young Hee Han, Jae Wook Lim
P050	Red bean pod injury by adult release of the legume pod borer, <i>Maruca vitrata</i> , in fields 37 Jin Kyo Jung, Bo-Yoon Seo
P051	Time dependent growth patterns of head capsule width and body surface area in <i>Paranura rosea</i> (Collembola: Neanuridae) 38 Nan-Hee Yang, Jino Son, Kijong Cho
P052	Individual variation in aggressiveness against conspecific advertisement signals in <i>Gryllus rubens</i> (Orthoptera: Gryllidae) 39 Yikweon Jang
P053	Binomial sampling plan for cryptic mealybug, <i>Pseudococcus cryptus</i> on citrus orchards in Jeju, Korea 40 Jeong Heub Song, Soon Yong Hong, Ki Taek Kim
P054	Harmonic radar tracking system for investigating dispersal of <i>Monochamus</i> spp., insect vectors of pinewood nematode 41 Sang-Hyun Koh, Chan Sik Jung, Yeong-Jin Chung, Jung-Im Hong, Sang-Chul Shin
P055	Temporal changes in adult density of <i>Platypus koryoensis</i> (Coleoptera: Platypodidae) within oak forests 42 Jung-Su Lee, Won-Il Choi, Dae-Sung Won, Jong-Kuk Kim, Kwang-Sik Choi, Sang-Chul Shin
P056	Annual changes in diversity and abundance of Notodontidae and Sphingidae (Lepidoptera) in Korea 43 Min-Young Kim, Won Il Choi, Young-Dae Kwon, Kwang-Sik Choi, Sang-Chul Shin
P057	Binary mixture toxicity of copper and manganese to soil collembolan <i>Paronychiuruskimi</i> 44 Jino Son, Nan-Hee Yang, Kijong Cho
P058	Mating environment favorable for colony development of the European bumblebee, <i>Bombus terrestris</i> 45 Hyung Joo Yoon, Sam Eun Kim, Kyeong yong Lee, Sang Beom Lee, In Gyun Park

●●● Chemical & Biological Control

Section Chairman : **Soo Dong Woo**

- P059** Screening insecticidal efficacies of various plant extracts to develop biochemical insecticide 46
Jung Hyun Park, Myung Heun Nam, Jae Joon Lee, Hyun Su Lee, Young Kwon Kim
- P060** Effects of transgenic Chinese cabbage pollens expressing *Bacillus thuringiensis* Cry1Ac toxin on *Bombyx mori* larvae 47
Young Ho Kim, Si Hyeock Lee
- P061** Construction of a recombinant *Bacillus subtilis* strain as an integrated control agent to control plant diseases and insect pests 48
Jong Yul Roh, Jae Young Choi, Yong Wang, Hee Jin Shim, Qin Liu, Hong Guang Xu, Jin-Cheol Kim, Yeon Ho Je
- P062** Larvicidal activity of *Asarum sieboldii* Miq against dengue vector *Aedes aegypti* 49
Haribalan Perumalsamy, Young-Joon Ahn
- P063** Advanced recombinant baculovirus expressing insect neurotoxin and *Bacillus thuringiensis* Cry toxin 50
Hee Jin Shim, Jae Young Choi, Yong Wang, Jong Yul Roh, Hong Guang Xu, Qin Liu, Soo Dong Woo, Byung Rae Jin, Yeon Ho Je
- P064** Construction of modified *Bacillus thuringiensis cry1AC* genes based on *cry1-5* genes through multi site-directed mutagenesis 51
Hong Guang Xu, Jong Yul Roh, Jae Young Choi, Hee Jin Shim, Yong Wang, Qin Liu, Byung Rae Jin, Yeon Ho Je
- P065** The effects of the root-zone application of some systemic insecticides on the nymph and egg mortalities of the brown planthopper, *Nilaparvata lugens* (Stål) on rice 52
Hong Hien Pham, Thi Vuong Pham, Jong Kyu Kim, Yoo Han Song
- P066** Toxicities and control effect of insecticide formulations to whiteflies, aphids and thrips 53
Jong Kwan Kim, Dong Ku Shin, Tae-Ki Ha, Cheol Jang, In-Choen Hwang
- P067** Efficacy of Vapormate™, methyl bromide alternative fumigant, against *Tetranychus urticae* 54
Hyeon Kyu Jang, Hyun Sik Rho, Byung-Ho Lee, Chung Gyoo Park

P068 Isolation and identification of entomopathogenic fungus against the pine sawyer, *Monochamus saltuarius* Gebler (Coleoptera: Cerambycidae) 55
Tae Young Shin, Sung Min Bae, Jae Bang Choi, Jeong Mi Oh, Jae Kyung Lee,
Hyun Na Koo, Soo Dong Woo

P069 Density estimation of *Bemisia tabaci* (Hemiptera: *Aleyrodidae*) in laboratory condition using robotics in conjunction with an image processing system ... 56
Chunlei Xia, Mu Qiao, Bu-Keun Chung, Jongman Cho, Tae-Soo Chon

Section Chairman : **SI Woo Lee**

P070 Biological assessment of *Aphelinus varipes* as biological control agent of *Myzus persicae* 57
Hee Bong Seok, Dae Hong Lee, Eun Jin Kang, Chang Wook Jo, Cho Rong Park,
Mi Ja Seo, Yong Man Yu, Young Nam Youn

P071 Feeding stimulants of pine sawyer beetle adult, *Monochamus saltuarius* (Coleoptera: Cerambycidae) from Korean white pine trees 58
Jeong-Oh Yang, Hee-Geun Ahn, Doo-Jin Noh, Changmann Yoon, Ju-Hwan Han,
Gil-Hah Kim

P072 Susceptibility of pine sawyer, *Monochamus saltuarius* adults (Coleoptera: Cerambycidae) to commercially registered insecticides 59
Ju-Hwan Han, Jong-Hyun You, Eun-Hee Kim, Jung-Oh Yang, Doo-Jin Noh,
Changmann Yoon, Gil-Hah Kim

P073 Feeding stimulant of sweetpotato whitefly, *Bemisia tabaci* biotypes B and Q to the pepper and tomato varieties 60
Jeong-Oh Yang, Eun-Hee Kim, Sang-Rae Moon, Hee-Geun Ahn, Doo-Jin Noh,
Changmann Yoon, Gil-Hah Kim

P074 Antifeedant of sweetpotato whitefly, *Bemisia tabaci* biotype-Q to the Nokkwang variety of red pepper 61
Jeong-Oh Yang, Eun-Hee Kim, Doo-Jin Noh, Hee-Geun Ahn, Changmann Yoon,
Gil-Hah Kim

P075 Control effect of acetamiprid+spinetoram SC against sweetpotato whitefly, *Bemisia tabaci* biotype-Q 62
Youlee Joo, Jeong-Oh Yang, Gil-Hah Kim, Dong-Ku Shin, Choel Jang, Eun-Choel Park,
In-Chon Hwang

- P076** Isolation and characterisation of cultivable bacteria from Tobacco whitefly *Bemisia tabaci* (Homoptera: Aleyrodidae) biotypes B and Q 63
Indiragandhi P., Youlee Joo, Jeong-Oh Yang, Gil-Hah Kim
- P077** Attractants and trap development for Ussur brown katydid, *Paratlanticus ussuriensis* (Orthoptera: Tettigoniidae) 64
Doo-Jin Noh, Jung-Oh Yang, Sang-Rae Moon, Changmann Yoon, Shin-Ho Kang, Ki-Su Ahn, Gil-Hah Kim
- P078** Toxicity of α -farnesene identified in *Perilla frutescens* whole plant to *Plutella xylostella* (Lepidoptera : Yponomeutidae) 65
Eun-Hee Kim, Hyun Kyung Kim, Doo-Jin Noh, Changmann Yoon, Gil-Hah Kim

●●● Nematology

Section Chairman : **Jae Kook Lee**

- P079** An new model of funnel for nematode separation in plant quarantine 66
In-Tark Park, Deuk-Soo Choi
- P080** Report of tree *Bursaphelenchus* (Nematoda: Parasitaphelenchidae) species distributed in Korea 67
Hyerim Han, Bo-Young Han, Yeong-Jin Chung, Sang-Chul Shin
- P081** Construction and characterization of stage-specific subtractive expressed sequence tag (EST) libraries of the pinewood nematode, *Bursaphelenchus xylophilus* 68
Jae Soon Kang, Hyoungsuk Lee, Il Sung Moon, Yi Lee, Si Hyeock Lee
- P082** Biochemical characterization of a monoclonal antibody (D9-F10) specific for *Bursaphelenchus xylophilus* 69
Dae-Weon Lee, A Young Kim, Won Tae Kim, Kook-Jin Lim, Yeon Ho Je, Si-Hyeock Lee, Young Ho Koh
- P083** Construction of secondary structure model of the 28S expansion segments D2 and D3 for *Subanguina moxae* (Tylenchida: Anguinidae) 70
Chang-Hwan Bae, Sun-Nam Park, Byeong-Yong Park
- P084** Comparison of nematode communities between the non-heavy metal contaminated soil and the heavy metal contaminated soil 71
Byeong-Yong Park, Sun-Nam Park, Byeong-Yeon Yeon, Jae-Kook Lee

P085	The survey of phytoparasitic nematodes in kiwifruit orchards 72
	Sun-Nam Park, Jae-Kook Lee, Byeong-Yong Park

●●●● The Other Areas

Section Chairman : **Sang Mong Lee**

P086	Functional role of cysteine proteinase cathepsin B in the silkworm <i>Bombyx mori</i> metamorphosis 73
	Kwang Sik Lee, Bo Yeon Kim, Hyung Joo Yoon, Pil Don Kang, Sang Mong Lee, Sook Jae Seo, Hung Dae Sohn, Byung Rae Jin
P087	Molecular characterization of iron binding proteins, transferrin and ferritin heavy chain subunit, from the bumblebee <i>Bombus ignitus</i> 74
	Bo Yeon Kim, Kwang Sik Lee, Young Moo Choo, Hyung Joo Yoon, Hung Dae Sohn, Byung Rae Jin
P088	Occurrence of seven honeybee viruses in Korean apiaries 75
	Yong Soo Choi, Myeong Lyeol Lee, Man Young Lee, Hye Kyung Kim, Kwang Gill Lee
P089	Detection of chronic bee paralysis virus (CBPV) by minus-strand-specific RT-PCR 76
	Yong Soo Choi, Myeong Lyeol Lee, Man Young Lee, Hye Kyung Kim, Kwang Gill Lee
P090	Detection of sacbrood virus (SBV) from the honeybee in Korea 77
	Yong Soo Choi, Myeong Lyeol Lee, Man Young Lee, Hye Kyung Kim, Kwang Gill Lee
P091	Ecological toxicity of acetaminophen on three native aquatic macroinvertebrate species (<i>Daphnia</i> sp., <i>Chironomus yoshimatsui</i> , and <i>Ephemera orientalis</i>) 78
	Hyoung-Ho Mo, Yong-Eun Kim, Sung-Eun Kang, Kijong Cho
P092	Genomic structure and phylogenic analysis of the <i>Spodoptera litura</i> granulovirus 79
	Yong Wang, Jae Young Choi, Jong Yul Roh, Hee Jin Shim, Soo Dong Woo, Byung Rae Jin, Yeon Ho Je
P093	Isolation and characterization of the novel antibacterial peptide "Coprison" from a dung beetle, <i>Copris tripartitus</i> 80
	Jae-Sam Hwang, Yeon-Ju Kim, Hea-Son Bang, Eun-Young Yun, Seong-Ryul Kim, Kwan-Ho Park, Hwa Jin Suh, Bo-Ram Kang, Iksoo Kim

- P094** Expression of the structural proteins of porcine reproductive and respiratory syndrome virus in Bm5 cells 81
Jeong Mi Oh, Jae Kyung Lee, Hyun Na Koo, Jae Young Choi, Kwang Sik Lee, Jong Yul Roh, Yeon Ho Je, Byung Rae Jin, Sung Sik Yoo, Jae Su Kim, Young In Kim, In Joon Yoon, Soo Dong Woo
- P095** Cloning, expression, and sequence analysis of the structural ORFs of the porcine reproductive and respiratory syndrome virus isolated in Korea 82
Hyun Na Koo, Jeong Mi Oh, Jae Kyung Lee, Jae Young Choi, Kwang Sik Lee, Jong Yul Roh, Yeon Ho Je, Byung Rae Jin, Sung Sik Yoo, Jae Su Kim, Young In Kim, In Joon Yoon, Soo Dong Woo
- P096** Molecular cloning, gene structure, expression and enzyme activity of a serine-like protease from *Laccotrephes japonensis* 83
Kwan-Ho Park, Seong-Ryul Kim, Eun-Young Yun, Hwa-Jin Suh, Si-Kab Nho, Jae-Sam Hwang
-
- Section Chairman : **Yeon Ho Je**
- P097** Molecular cloning and expression of the antimicrobial peptide attacin from the swallowtail butterfly, *Papilio xuthus* 84
Seong-Ryul Kim, Ha-Yan Park, Mee-Yeon Hong, Kwan-Ho Park, Hwa-Jin Suh, Jae-Sam Hwang, Iksoo Kim
- P098** Optimization of EasyBac system for high-throughput expression of recombinant proteins 85
Jae Young Choi, Yang-Su Kim, Hee Jin Shim, Yong Wang, Jong Yul Roh, Soo Dong Woo, Byung Rae Jin, Yeon Ho Je
- P099** Construction of novel *Escherichia coli*-*Bacillus thuringiensis* shuttle vector using a modified plasmid capture system 86
Qin Liu, Jong Yul Roh, Yong Wang, Hee Jin Shim, Jae Young Choi, Hong Guang Xu, Byung Rae Jin, Yeon Ho Je
- P100** *Gregarina* sp. a Protozoa parasite of the daikon leaf beetle, *Phaedon brassicae* in Daegwallyeong 87
Ju Il Kin, Jee Sun Min, Si Hyeock Lee, Min Kwon
- P101** Simultaneous detection and differentiation of *Nosema apis* and *Nosema ceranae* by multiplex PCR in honeybee 88
Ji-Young Choi, Jong-Gill Kim, Young-Cheol Choi, Won-Tae Kim, Gil-Sang Jeong, Seok-Jo Hwang

P102	Oviposition and colony development of undiapaused <i>Bombus terrestris</i> queens in 3rd generation 89 In Gyun Park, Hyung Joo Yoon, Sang Beom Lee, Kyeong Yong Lee, Sun Joo Jang, Young Cheol Choi
P103	Foreign gene induction into <i>Bombyx mori</i> egg by electroporation 90 Min-Uk Kang, Si-Kab Nho, Seok-Woo Kang, Kwang-Ho Choi, Tae-Won Goo
P104	Characterization and <i>cis/trans</i> isomerase activity of <i>Bombyx mori</i> Cyclophilin A 91 Sung Wan Kim, Eun Young Yun, Kwang Ho Choi, Min Uk Kang, Seok Woo Kang, O-Yu Kwon, Tae Won Goo
P105	Molecular characterization of heat shock protein 70 promoter from the silkworm, <i>Bombyx mori</i> 92 Yong Bo Kim, Sung Wan Kim, Hee Joo Ryou, Eun Young Yun, Kwang Ho Choi, Min Uk Kang, Seok Woo Kang, O-Yu Kwon, Tae Won Goo
P106	Characterization of endoplasmic reticulum oxidoreductase (ERO1) gene from <i>Bombyx mori</i> 93 Hee Joo Ryou, Sung Wan Kim, Yong Bo Kim, Eun Young Yun, Kwang Ho Choi, Min Uk Kang, Seok Woo Kang, O-Yu Kwon, Tae Won Goo

●●●● Taxonomy & Morphology

Section Chairman : 홍기정

P107	경주국립공원의 곤충 분포상 94 박신영, 변봉규, 이봉우, 권두희, 이유미, 조동광
P108	한국산 <i>Pauesia</i> 속 (벌목, 고치벌과, 진디벌아과)의 1신종기재 95 권두희, 변봉규, 이봉우, 정 근
P109	한국산 가루이(Hemiptera: Aleyrodidae) 미기록 4종 추가 96 서수정

●●●● Physiology, Genetics & Chemical Ecology

Section Chairman : 이 경 열

- P110** 저온처리에 의한 모시나비 알의 휴면타파와 실내 계대사육법 체계 확립 97
안난희, 설광열, 홍성진, 김남정, 김성현, 한지희
- P111** 배추좀나방과 파좀나방의 교미전 생식격리 요인 비교 98
경태현, 양창열, 김형환, 유용만
- P112** 땅뒤영벌(*Bombus terrestris*)의 휴면과 관련된 난황단백질(Vitellogenin)의 발현 연구 99
공미선, 송우근, 이경열
- P113** 애벌레 흡즙행동의 electrical penetration graph 측정 100
권윤희, 서보윤, 정진교, 김길하

●●●● Insect Ecology & Behavior

Section Chairman : 김 동 순

- P114** 호박에서 호박과실파리 발생 피해 양상 및 간이에찰법 개발 101
강택준, 전홍용, 양창열, 김형환
- P115** 세 가지 콩 품종이 톱다리개미허리노린재(*Riptortus clavatus* Thunberg)의 생물학적 특성에 미치는 영향과 야외 발생 비교 102
김상원, 김은목, Bishwo P. Mainali, Md. Abdul Alim, 임언택
- P116** 솔수염하늘소 산란행동에 의한 소나무재선충 이동 103
김동수, 이상명, 이상태, 김철수, 이동운, 박정규
- P117** 고랭지 배추밭에서 배추좀나방 초발생기와 월동 여부 104
권 민, 김기덕, 김주일, 이승환
- P118** 주홍날개꽃매미의 생태 특성 105
박지두, 박일권, 김준현, 서선미, 이연숙, 이상길, 신상철
- P119** 회양목명나방의 생태 특성 106
박일권, 김준현, 서선미, 이연숙, 이상길, 신상철
- P120** 하천습지인 석촌습지와 산지습지인 외고개습지에 서식하는 곤충상 비교 107
박정찬, 김현우, 박정규, 추호렬

P121	수박에서 목화진딧물 발생 수준이 과일 품질에 미치는 영향 108 문형철, 김한희, 최민경, 엄미정, 장 익, 신용규, 황창연
P122	꼬마남생이무당벌레의 발육에 미치는 온도의 영향 109 전홍용, 김형환, 양창열, 강택준, 조명래
P123	침엽수 채종원에 발생하는 딱정벌레목 곤충상 110 이신혜, 정영학, 이동운, 강진택, 유세걸, 추호렬, 박정규
P124	분재원에서 발생하는 해충 111 유황빈, 이석준, 이상명, 김동수, 김철수, 추호렬, 박정규, 이동운
P125	전북 친환경 벼 재배지역의 끝동매미충(<i>Nephotettix cincticeps</i> Uhler)의 월동 밀도 및 RDV 보독충률 112 강미형, 백채훈, 강석민, 이용주, 서미자, 이견휘
P126	외래해충 알팔파바구미(<i>Hypera postica</i> Gyll) 작물별 가해양상 및 피해 113 이견휘, 배순도, 김현주, 백채훈, 강미형, 서미자
P127	온도가 근대 흰띠명나방 발육에 미치는 영향 114 임주락, 유 진, 김주희, 조승현, 이기권, 류 정, 황창연
P128	지구온난화에 따른 지역별 애멸구(<i>Laodelphax striatellus</i> Fallén) 발생시기 비교 .. 115 김광호, 이상계, 박형만, 최병렬, 한은정, 안효원, 엄기백
P129	애멸구(<i>Laodelphax striatellus</i> Fallén) 약충의 령기별 온도발육과 관련된 6개 발육률 함수에 관련된 파라미터 추정 116 김광호, 이상계, 박형만, 최병렬, 한은정, 안효원, 엄기백

P130	조각깔따구(파리목: 깔따구과)의 계대사육 117 백민정, 윤태중, 황정미, 모형호, 조기중, 배연재
P131	기주의 수직분포가 기생자의 탐색 행동에 미치는 영향 : 화랑곡나방과 보리나방살이고치벌의 예 118 신재협, 남영우, 류문일

P132	세줄콩들명나방(<i>Omiodes indicatus</i> (Fabricius))의 피해해석을 위한 유충접종 및 인위적엽에 따른 콩 생육 및 수량 119 최규환, 홍윤기, 문정섭, 김치선, 장영직, 최동철, 김태홍
P133	솔수염하늘소(<i>Monochamus alternatus</i>)의 소나무 내 분포와 우화 120 유황빈, 이동운, 정영학, 추호렬, 박정규
P134	유인물과 유인트랩에 따른 톱다리개미허리노린재와 가로줄노린재의 유인효과 121 배순도, 김현주, 이건휘, 강항원
P135	콩꼬투리혹파리의 국내외 발생 정보 122 배순도, 김현주, 이건휘, 강항원
P136	파프리카 온실에서 위치에 따른 담배가루이(<i>Bemisia tabaci</i>)의 년중 밀도변동 ... 123 김종규, 민수정, 팜홍히엔, 박정규, 송유한
P137	호박과실파리(<i>Bactrocera (Paradacus) depressa</i>) (Shiraki)의 성충의 짝짓기 전 행동관찰 124 김태홍, 진성욱, 김양표

●●● Chemical & Biological Control

Section Chairman : 배 순 도

P138	Prohexadion-Calcium이 꼬마배나무이 방제에 미치는 영향 125 조영식, 최장전, 송장훈, 황해성
P139	배에서 농약희석물량 조절에 따른 방제 126 조영식, 이인구, 송장훈, 황해성
P140	배에서 Paste형 교미교란제의 방제효과 127 조영식, 송장훈, 황해성
P141	중부지역 포도주산지 꽃매미(<i>Lycorma delicatula</i>) 발생분포 및 약제선발 128 송명규, 이기열, 김익환, 김현주
P142	유기농 포도 재배지에서의 포도들명나방(<i>Herpetogramma luctuosalis</i>) 발생소장 및 약제선발 129 송명규, 이기열, 김현주, 김익환

P143	솔수염하늘소 방제약제 치아클로프리드의 살충활성 및 약효지속성 130 이상명, 김동수, 김철수, 이동운, 추호렬
P144	한국마사회 경기도 원당 경마교육원의 흡혈성 등에(Diptera: Tabanidae)에 관한 연구 131 박영규, 신상언, 김아람, 김진갑, 노선환, 양영철
P145	꼬마남생이무당벌레를 이용한 목화진딧물의 생물적 방제 132 김형환, 전홍용, 양창열, 강택준
P146	딸기 해충방제를 위한 멀구슬과 제충국 시제품의 천적 독성 및 포장 방제 133 김도익, 김선곤, 강범용, 김진섭, 김상수
P147	소나무재선충병 모두베기방제의 방제효과 134 권태성, 임중환, 김영걸, 신준환
P148	고농도 질소충진 캔 포장 분유제품에서의 화랑곡나방 발육억제 효과에 대한 연구 ... 135 나자현, 남영우, 천용식, 신현정, 권영환, 박종석, 류문일
P149	논토양에서 분리한 <i>Bacillus thuringiensis</i> subsp. <i>kurstaki</i> HARI004 균주의 특성조사 및 흑명나방, 벼애나방에 대한 살충활성검정 136 서미자, 백채훈, 강미형, 이진휘, 이두구, 강위금, 최수연, 윤영남, 유용만
P150	토양에서 분리한 곤충병원성세균 <i>Bacillus thuringiensis</i> 가 벼흑명나방과 벼애나방에 대한 실내살충효과검정 및 이들의 생물학적 특성에 미치는 영향 137 서미자, 백채훈, 강미형, 이진휘, 강위금, 최수연, 김진수, 윤영남, 유용만
Section Chairman : 이 기 열	
P151	배추 파밤나방 요방제 수준 설정 138 김선곤, 김도익, 강범용, 박종대, 최경주
P152	제충국과 멀구슬을 이용한 주요해충 방제효과 및 벼멸구 방제를 위한 살포간격과 횡수 결정 139 김선곤, 김도익, 강범용, 고숙주, 최경주
P153	황온좀벌(<i>Eretmocerus eremicus</i>) 번데기에 대한 저독성약제 140 최병렬, 박형만, 박홍현, 이시우, 한만중
P154	해충방제용 친환경농자재의 살충 효과 141 박종호, 이병모, 지형진

P155	식물추출물과 구리테이프에 대한 달팽이류 기피효과 142 김현주, 배순도, 이진휘, 강항원, 박정규
P156	왕우렁이에 대한 구리테이프의 이동차단 효과 143 김현주, 배순도, 이진휘, 강항원, 박정규
P157	2007년 베트남, 중국 및 국내 비래벼멸구의 약제저항성 144 최병렬, 김광호, 한은정, 박흥현, 이상계, 박형만

●●●● Nematology

P158	고구마뿌리혹선충(<i>Meloidogyne incognita</i>) 피해경감을 위한 대항식물 탐색에 관한 연구 145 박정찬, 이동운, 박정규, 추호렬, 김형환, 최성환
-------------	---

●●●● The Other Areas

P159	농생태계에 분포하는 지렁이 종 분포 조사 146 김태홍, 홍 용, 최낙중
P160	Microsatellite marker 분석에 의한 베트남내 지역별 벼멸구(<i>Nilaparvata lugens</i>)의 유전적 유연관계 147 민수정, 박정규, 송유한