



IXth European Congress of Entomology
22-27 August 2010
Budapest, Hungary

Programme
and
Book of Abstracts

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Committees

Committees

Presidium Members

Zbigniew T. Dabrowski (Poland), Elected Member
Silva Dorn (Switzerland), Elected Member and Deputy Chair
Klaus H. Hoffmann, (Germany), Elected Member and Chair
Scott Johnson (UK), Elected Member and Secretary
François Lieutier (France), Elected Member
Tamás Várhelyi (Hungary), Chairman of the Organizing Committee ECE 2010, Honorary Presidium Member

National Organising Committee

Gábor Balonyi (Szent István University)
Klára Balázs (Plant Protection Institute, HAS)
Béla Darvas (Plant Protection Institute, HAS)
László Fehér (Hungarian Natural History Museum)
Adrián Fónagy (Plant Protection Institute, HAS)
Péter Irig (COMPLEXIO)
Gábor Jenser (Plant Protection Institute, HAS)
Zoltán Korsós (Hungarian Natural History Museum)
András Kun (Hungarian Natural History Museum)
Viktor Marikó (Corvinus University Budapest)
István Matkóczy (Hungarian Natural History Museum)
László Papp (Hungarian Natural History Museum)
Béla Péntes (Corvinus University Budapest, Dept. of Entomology)
Zsolt Péntes (Institute of Genetics BRC and Dept. of Ecology SZTE)
Dávid Rédei (Hungarian Natural History Museum)
Lajos Rózsa (Hungarian Natural History Museum)
Gábor Szűcs (Plant Protection Institute, HAS)
Tamás Várhelyi (Hungarian Natural History Museum)
Károly Vig (Natural History Department, Savaria Museum)

Welcome to ECE 2010

It is a great pleasure to welcome you, on behalf of the National Organising Committee of ECE 2010, at the 9th European Congress of Entomology.

2010 is the year to celebrate the 100th Anniversary of the Hungarian Entomological Society. This is also the International Year of Biodiversity - and we all know how diverse insects are...

The series of ECE congresses, in every 4th year (alternating with ICE, the International Congress of Entomology) had already some history, with an earlier congress held also here in Hungary, together with SIEEC, at Gödöllő, in 1991. For Hungarian entomologists, to host again the congress, and offer the environment for a fruitful as well as a human gathering of fellow entomologists is a great honor.

We have altogether 855 accepted submissions, from Sunday evening till Friday noon. The credit for this rich response on our call should mainly go to our International Presidium, the National Organising Committee, and to all these symposium organisers, who made their best to invite entomologists from all over the World, reviewed their abstracts, and outlined the programme of these symposia. Plenary speakers were invited by the NOC, and we are looking forward to listen to their presentations of a broader scope. ECE 2010 features 7 plenary talks and 37 symposia, held in 3-5 parallel sessions, together with an Exhibition in the venue and a visit in the Hexapod Empire exhibition in the Hungarian Natural History Museum.

ECE is of an interdisciplinary character involving a wide range of research directions. ECE attracts taxonomists, systematists, ecologists, physiologists, toxicologists, biochemists, ethologists, experts of biocontrol, specialists and generalists alike, working in any aspect of entomology, i.e. in relation with the most wonderful group of organisms on Earth: insects. Even insects - at least mosquitoes are attracted by the congress, too. Hopefully, this "ECE way" of organisation is able to build bridges between these diverse branches of research and their various masters.

ECE 2010 is held at the European Congress Center, Budapest, not far from the city. Buda has been built upon hills, and those, looking after some fresh air after the congress hours, may find it by a short walk from this relatively new facility, near the recreation zone of the capital.

Both the NOC and myself, we hope you would enjoy the congress, and also find our culture - from architecture to music and food - refreshing.

Tamás Vászárhegy
Chairman of the National Organising Committee

General information

Venue

Europa Congress Center
(Address: H-1021 Budapest, Pilis utca 2.)

Floor "-1": meeting room "Copenhagen", exhibition, welcome reception, coffee breaks
 Floor "0": meeting rooms "Brussels", "Maastricht", "Rome", "Strasbourg", speakers' ready room (room: "Zurich") with public Internet access, poster area, registration and information desk
 Floor "1": lunch

Registration and information desk

Opening hours

Sunday, 22 August	14.30 – 17.30
Monday, 23 August	07.30 – 18.30
Tuesday, 24 August	08.00 – 18.30
Wednesday, 25 August	08.00 – 15.30
Thursday, 26 August	08.00 – 18.30
Friday, 27 August	08.00 – 14.00

On-site payments can be settled in cash (EUR or HUF) only. The ATM closest to the congress venue is available at Buda Gyöngye shopping center (accessible by bus from the congress venue).

Speakers' instructions

Oral presentations

The meeting rooms are equipped with PC, Laptop and data projector.

Presenters are requested to upload their presentations to the room laptop in due time before their session starts. This opportunity is open during the above opening hours. Technical assistance will be provided in the meeting rooms.

Laptops are equipped with Windows XP Professional, Powerpoint, Adobe Reader, Windows Media Player and VLC Video Player.

Speakers' Ready room: room Zurich on floor "0".

Posters

Set up: 08.00 – 10.00 on the day of the poster session in question
 Removal: 16.00 (right after the session)
 Room "Zurich" is provided for storing the removed posters for 24 hours.

Posters are marked in the Programme with the day of the session they are to be presented and with the number of the poster stand to be hung on. For example: "TU 24" means that the poster will be presented during Tuesday session on stand No: 24.

Exhibition

The exhibition is held in the coffee break area (floor "-1") during the congress hours.

Internet access

Free Wireless Internet access is available in the building. Public Internet access is available in the Speakers' Ready Room.

Badges

Please, make sure that you wear your badge in every event you participate, including coffee breaks, lunch and the social events.

Social events

All registered participants are cordially invited.

Welcome Reception

Sunday, 22 August, 19.00 – 21.00
Floor "1", Congress venue

Cocktail

Wednesday, 25 August, 16.00 – 18.30
departure from the Congress venue: 15.30
departure from the Museum: 18.00

The plenary lecture in the Hungarian Natural History Museum (address: Budapest VIII, Ludovika tér/square 2-6.) will be followed by a visit of the museum exhibition Hexapod Empire and a cocktail party. Special buses are provided from the venue and back.

Closing session & farewell cocktail

Friday, 27 August, 13.00 – 14.00
Floor "1", room "Copenhagen"

Optional programmes

Gala Dinner on the Boat "Európa"

Thursday, 26 August, 19.30 – 22.00
address: Budapest, Buda side, the quay at Szilágyi Dezső tér (square)

Special buses are provided for the Gala Dinner from the venue and back.

departure of buses: 18.30
boarding: 19.00
departure of the boat: 19.30
approximate arrival: 22.00 – 22.30
price: EUR 60

During the cruise on the River Danube you can enjoy magnificent views of historical Budapest and catch a glimpse of Margaret Island, the Parliament, Hotel Gellért, the Liberty Monument, the graceful bridges and a number of stunning buildings. Besides, you may taste traditional Hungarian meals and drinks.

Tours

Budapest sight-seeing (half-day)

Monday, 23 August, afternoon
departure: 13.30 from the Congress venue
price: EUR 30

During the bus trip you may have an overall view of Budapest, one of the most exciting capitals in the world with a gorgeous geographic location, full of historical monuments and places of interest.

Danube Bend tour (full-day, lunch is included)

Tuesday, 24 August
departure: 09.00 from the Congress venue
arrival: approx. 17.00
price: EUR 80

The tour offers you visiting three small old towns crowning the picturesque Danube Bend: Szentendre – a unique artists' town, Máca – a former royal seat, Esztergom – the former capital of Hungary.



WE 28

Life table parameters of *Rhopalosiphum padi* (L.) (Homoptera: Aphididae) on different barley cultivars

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Life table parameters of the bird cherry-oat aphid *Rhopalosiphum padi* (L.) were studied on various commercial Iranian barley cultivars including Nosrat, Valfajr, Reihan03, Fajr30, Zarjoo and Kavir to determine susceptibility or resistance of the cultivars. The stock colony was established by aphids collected from barley, *Hordeum vulgare* L. fields in Tehran, central part of Iran. All experiments were carried out under laboratory conditions at 26±1°C, 65 ±5% RH and photoperiod of 16 L: 8 D hours using plastic clip cages. For each cultivar tested in this work, 30 newly emerged nymphs were selected as cohort and monitored at 24 h intervals to record nymphal developmental time, reproduction, longevity, mortality and fecundity. Nymphal developmental time (from first instar to adult emergence) was longest on Nosrat (6.09 days) and lowest on Kavir (6.67 days) cultivars. The nymphal survivorship varied from 71% to 88 % on the cultivars tested; feeding on Nosrat reduced the total fecundity of the aphid (55.95 offspring/aphid). The intrinsic rate of natural increase (r_m) ranged between 0.305 and 0.363 females/female/day. The range of other life table parameters was from 1.37 to 1.44 for finite rate of increase (λ), 1.89 to 2.17 days for doubling time (DT) and 10.28 to 11.87 days for mean generation time (T). Accordingly, analysis of the biological parameters of *R. padi* on different barley cultivars indicated Valfajr as the least susceptible cultivars while Reihan03 were considered as the most sensitive. The outcome of the present paper is likely to collate required information to anticipate the trend of population growth and consequently to organize the integrated pest management project.

WE 29

Effects of the juvenoid pyriproxyfen on the pistachio green stink bug, *Brachynema germari* Kol. (Hem.: Pentatomidae): biology and energy metabolism

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The use of juvenoids offers selective control of pests without killing the beneficial and innocuous species, and minimal chemical contamination of the environment. These disrupt the hormonal balance of insect's body and slowly act on sensitive stages of the insect life stages. Biological parameters of last larval instar, percentage of egg hatching and adults longevity and oviposition of the pistachio green stink bug, *Brachynema germari* Kol (Hem.: Pentatomidae) were tested by different concentrations of pyriproxyfen (Admiral, 10 EC). Survival and time needed for beginning metamorphosis were different in treated insects. There was a significant decrease in longevity of the adults and egg hatching. In general, it can be concluded that *B. germari* as a pentatomid important pest can be affected by the juvenoid in all developmental stages which can be considered in integrated pest management program when a juvenile hormone agonist is a candidate.

WE 30

The efficacy of kaolin on damage reduction of pomegranate fruit moth, *Ectomyelois ceratoniae* (Lep.: Pyralidae), in pomegranate orchards

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Pomegranate fruit moth (PFM), *Ectomyelois ceratoniae* (Lep.: Pyralidae), is the most important of pomegranate in Iran. Application of the kaolin particle film (Sepidan® WP) might be an alternative for control of the pomegranate fruit moth and reduction of pomegranate sunburn. To assess the impact of kaolin on damage of pomegranate fruit moth, trials were conducted in the fields during spring to summer 2009 in 3 regions of Iran (Saveh, Garmsar and Qom). The different concentrations of kaolin (2.5, 5 and 10%) were sprayed over the whole canopy and fruits four times at 4-5-week intervals from early May to early September. Based on the field studies, the infection rates of PFM were 10 and 3.4% for control and kaolin treatment (at 10% concentration), respectively. Sunburn damage of fruits was reduced from 15% in untreated control to 6% in the kaolin WP-treated fruits. Also the result showed that, the flower & fruit drop, fruit cracking, aphids and mites damage was reduced in kaolin treatments. Therefore, naturally occurring products, such as kaolin, could be used successfully to reduce biotic and abiotic harmful agents on pomegranate.

WE 31

Impact of Thrips on Cowpea

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Thrips have been documented as a major insect pest of cowpea in much of the world especially Africa. They damage cowpea plants by feeding on both foliage and blooms. In the U.S. common species include the flower thrips, *Frankliniella tritici* (Fitch); soybean thrips, *Sericothrips variabilis* (Beach); and tobacco thrips, *F. fusca* (Hinds). Flower thrips damage cowpea blooms by directly feeding on the flower and pollen. Soybean and tobacco thrips feed on foliage resulting in discoloration and distortion of the leaf tissue. Although damage from thrips feeding on foliage is common and appears substantial, recent studies have demonstrated little impact on cowpea yield. Caging up to ten *F. fusca* per cowpea seedling failed to significantly reduce seed number, seed weight or yield when compared to cowpea seedling caged with no thrips. Also, no significant differences in the days to initial flowering were detected among the treatments, i.e., 0, 2.5, 5 or 10 thrips per seedling. A caging system was developed to hold different numbers (0 to 5) of *F. tritici* on individual cowpea flowers. Again, no significant differences were detected among the treatments for number of seed per pod, seed weight per pod or weight per seed. Thus, data indicate that the impact of thrips on cowpea produced in the U.S. is likely less than previously thought. Yield increases resulting from insecticides applied for thrips management on cowpea may be due to interactions between the insecticide and the plant.