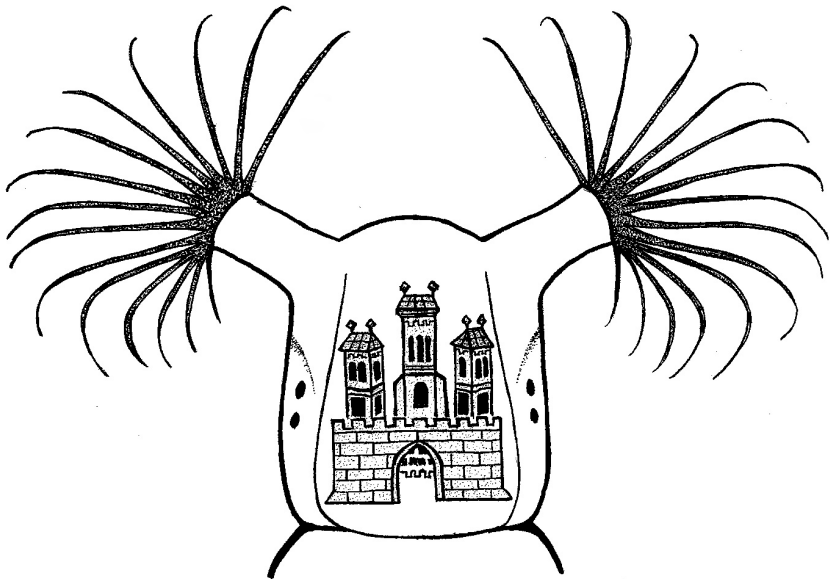


**5th International Simuliid Symposium**  
including the 32th Meeting of the British Simuliid Group

**Programme and abstract book**



**Faculty of Natural Sciences  
Comenius University in Bratislava  
Slovakia  
September 3 – 7, 2012**

Organising committee:

Matúš Kúdela, Viera Stloukalová, Tatiana Brúderová

Editors of the book of abstracts:

Matúš Kúdela & Viera Stloukalová



## **PROGRAMME**

### **Monday 3 September**

since 16:00 Registration (botel Fairway)

19:00 – 21:00 Welcome party (botel Fairway)

### **Tuesday 4 September**

8:30 – 9:00 Registration (Faculty of Natural Sciences, Comenius University)

9:00 – 9:30 opening of the Symposium

9:30 – 13:10 presentations

13:10 – 15:00 lunch break

15:00 – 16:00 presentations

16:30 – 22:00 Visit of the Červený kameň castle and  
the wine cellar Fuggerov dom in village of Častá, dinner

### **Wednesday 5 September**

whole day field trip

departure of the boat 8:30

arrival with bus cca 20:00

### **Thursday 6 September**

9:00 – 13:10 presentations

13:10 – 15:00 lunch break

15:00 – 18:00 presentations

19:30 gala dinner



## ORAL PRESENTATIONS

### Tuesday 4 September

- 9:30 – 10:10 Peter H. Adler: Biodiversity, ancient DNA barcodes, and symbiotic surprises in the Simuliidae
- 10:10 – 10:30 Matúš Kúdela, Ladislav Jedlička, Tatiana Brúderová & Rasa Bernotiene: *Simulium reptans*, *Simulium galeratum* and similar species in Europe
- 10:30 – 10:50 Tatiana Brúderová, Matúš Kúdela: Morphological and genetic variability of *Simulium colombaschense* – the type species of the genus *Simulium*
- 10:50 – 11:10 Matúš Kúdela, Ladislav Jedlička & Rasa Bernotiene: Status of *Simulium* (*Wilhelmia*) *lineatum* and *Simulium* (*Wilhelmia*) *balcanicum* according to analysis of mtDNA COI gene
- 11:10 – 11:30 **COFFEE BREAK**
- 11:30 – 11:50 Peter H. Adler, Abdullah Inci, Alparslan Yildirim, Gunther Seitz & Onder Duzlu: Chromosomal insights into the pest status of the subgenus *Wilhelmia* in Turkey
- 11:50 – 12:10 Abdullah Inci, Alparslan Yildirim, Onder Duzlu, Peter H. Adler, Zuhul Biskin, Arif Ciloglu, Hakan Yesiloz, Ahmet Demircioglu & Gunther Seitz: Molecular characterization of blackflies (Diptera: Simuliidae) collected from Kizilirmak River in Nevsehir province of Turkey
- 12:10 – 12:30 Alexey Yankovsky, Yerbol Issakayev, Daria Khassanova & Aisulu Tailakova: New blackfly species in the genus *Montisimulium* from the north-eastern Kazakhstan
- 12:30 – 12:50 Marija Ivković, Marijana Kesić & Zlatko Mihaljević: Temporal and spatial variations in phenology patterns of blackflies (Diptera: Simuliidae) and their longitudinal distribution along oligotrophic freshwater system
- 12:50 – 13:10 John W. McCreaddie & Peter H. Adler: A metacommunity view of black fly species assemblages
- 13:10 – 15:00 **LUNCH BREAK**
- 15:00 – 15:20 Irina Budaeva & Ludmila Khitsova: The species composition and altitude distribution of black flies (Diptera, Simuliidae) of the North-West Caucasus streams
- 15:20 – 15:40 Matúš Kúdela, Aleksandra Ignjatović Čupina, Tatiana Brúderová & Dušan Petrić: The blackfly fauna (Diptera, Simuliidae) of the Iron Gate area (eastern Serbia, southwestern Romania) in the past and present
- 15:40 – 16:00 Liudmila Petroschitskaya & Vera Rodkina: Zonal and latitudinal distribution of blackflies (Diptera, Simuliidae) in the West Siberia



## Thursday 6 September

- 9:00 – 9:55 Rory Post: **Entomology and the elimination of onchocerciasis by community directed treatment with Ivermectin in Africa**
- 9:55 – 10:15 Poppy H.L. Lamberton, Robert A. Cheke, Osei-Atweneboana, M.Y., Winskill, P., Rory J. Post, Tetteh-Kumah, A., Shew, K.J.S., Wilson, M.D. & Maria-Gloria Basáñez: ***Simulium damnosum* complex geographical distribution and host choice in Ghana where onchocerciasis transmission is under ivermectin control**
- 10:15 – 10:35 Elmer W. Gray, Joseph P. Iburg, Roger D. Wyatt, Robert A. Fusco & Raymond Noblet: **The effect of seston on larval black fly mortality after exposure to a *Bacillus thuringiensis* subsp. *israelensis* based larvicide**
- 10:35 – 11:05 **COFFEE BREAK**
- 11:05 – 11:25 Charles Brockhouse, Soochin Cho, Alexie Papanicolaou, Rory Post, Daniel Boakye, Michael Pfrender & John K. Colbourne (Simulium Genomics Consortium): **Progress in the Simulium Genomics Project**
- 11:25 – 12:45 Inaki Tirados, Evans Muki, Pierre Baleguel, Graham A. Matthews & Robert A. Cheke: **How do blackflies identify their hosts? Results of a preliminary study of visual and olfactory responses of *Simulium squamosum* B in Southern Cameroon**
- 11:45 – 12:05 Ruiz-Arrondo I., Martinez E., Kotter H., Figueras L., Muñoz A., Delacour-Estrella S., Alarcón-Elbal P. M., Pinal R. & Lucientes J.: **Blackfly outbreak in Zaragoza in 2011. Spread of blackflies in the Middle Ebro Valley in north-east Spain**
- 12:05 – 12:25 Rasa Bernotiene & Milda Zygutiene: **The pause in blackfly control in Lithuania**
- 12:30 – 13:15 **poster session**
- 13:15 – 15:00 **LUNCH BREAK**
- 15:00 – 15:20 Robert A. Cheke, Tetteh-Kumah, A., Rory J. Post, Poppy H. L. Lamberton & Maria-Gloria Basáñez: **Compact discs for sampling immature stages of members of the *Simulium damnosum* complex**
- 15:20 – 15:40 Doreen Werner & Adrian Pont: **New results on Diptera predators in the black fly plague areas of South Africa**
- 15:40 – 16:00 Aleksandra Ignjatović Čupina, Dušan Petrić, Elias Papadopoulos, Sokratis Ptochos, Domenico Otranto, Filipe Dantas-Torres, Yassen Mutafchiev & Odile Bain: **Notes on blackfly fauna in Western Thrace (northeastern Greece)**



5th International Simuliid Symposium  
Bratislava, Slovakia, September 3 – 7, 2012

- 16:00 – 16:20 Simone Ciadamidaro: **Preliminary notes on black fly fauna in Piedmont region, northern Italy**
- 16:20 – 16:40 **COFFEE BREAK**
- 16:40 – 17:00 Csaba Deák & Krisztián Kovács: **First records of *Simulium (Hellichella) latipes* (Meigen, 1804) (Diptera: Simuliidae) in Hungary**
- 17:00 – 17:20 Bruno Maiolini, Sonia Endrizzi & M. Cristina Bruno: **Blackflies as indicators of ecological stress in two Alpine streams with different land use in the catchment**
- 17:20 – 17:40 Rooschanak Foroutan Saravi & Norbert Becker: **The Simuliidae fauna of South West Germany**
- 17:40 – 18:00 Rasa Bernotiene, Irina Budaeva, Erbol Issakaev & Liudmila Petrozhitskaya: **Comparison of *Simulium maculatum* Mg. biology in different parts of Palaearctic**

## POSTER PRESENTATIONS

Sergej V. Aybulatov: **Blackflies (Diptera: Simuliidae) of Leningradskaya and Vologodskaya regions (Russia)**

Simone Ciadamidaro, Dušan Petrić, Aleksandra Ignjatović-Ćupina & Matúš Kúdela: **Black fly species succession from Alps to lowland rivers in Piedmont, north-western Italy**

Atefeh Khazeni, Zakieh Telmadarrehy, Mohammad-Ali Oshaqi, Hasan Vatandoost & Seyed Mohammad Abtahi: **A new study on blackflies (Simuliidae) of Iran in central regions**

Gunter Seitz: **The Blackfly Fauna (Diptera: Simuliidae) of the Gesäuse National Park in Austria**

Andrej Štangler: **Typology of running waters according to blackfly communities in conditions of Borská nížina lowland (West Slovakia)**

Hakan Yesiloz, Alparslan Yildirim, Peter H. Adler, Abdullah Inci, Onder Duzlu, Arif Ciloglu & Zuhail Biskin: **Molecular classification of some simuliid larvae collected from Central Basin of Kizilirmak River based on the sequence analyses of mt-COI and ITS-2 gene regions**



## Black fly species succession from Alps to lowland rivers in Piedmont, north-western Italy

SIMONE CIADAMIDARO<sup>1</sup>, DUŠAN PETRIĆ<sup>2</sup>, ALEKSANDRA  
IGNJATOVIĆ-ČUPINA<sup>2</sup> & MATUŠ KÚDELA<sup>3</sup>

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The Alps surround Piedmont region in Italy all along its western and northern sides, like a mountain arch dropping down sharply to the Po plane. In this area, rivers and streams can flow from 3000 to 100 m altitude in only 25 – 30 km span. Therefore, a corresponding fast change of ecological conditions can be observed in water-courses: biological communities, such as species assemblages of black flies (Diptera, Simuliidae), mirror the same ecological succession through a definite species shift. The last comprehensive study of black fly species distribution in Piedmont was carried out half a century ago; a preliminary update was performed during 2011 and 2012 by a joint sampling campaign of ENEA (Italy) and the University of Novi Sad (Serbia) and between 2008 and 2012 sampling was performed in Alpi Marittime by the Comenius University in Bratislava (Slovakia). In this study we present the actual distribution of black fly species along the altitude range in Piedmont, from small mountain brooks down to streams and lowland rivers.

Black fly larvae and pupae were collected in nearly 70 sites quite homogeneously distributed from 2000 (Alpine valleys) to 85 metres (Po river close to Alessandria). Adults were obtained from mature pupae in the laboratory.

A total of 24 species were identified, with *S. variegatum* proving to be the most frequent (34 sites); 8 species were collected only in single sites. The study of the altitude range of black fly species showed that *S. variegatum* can be collected from the highest valleys (1630 m) to the large plane rivers (94 m). Other species, such as *P. rufipes* (537 – 1916 m), *S. argyreatum* (537 – 1916 m) and especially *S. maximum* (1100 – 1926 m) were characteristic of mountain sites. *S. cryophilum* and *S. argenteostriatum*, though associated more to cold waters, could still be collected in low hill streams (down to 302 and 385 m respectively). *S. reptans* was collected in low hills and the upper areas of the Po plane (102 – 402 m), but it was not collected in higher hill or lower plane sites, as it happened with *S. ornatum* (82 – 731 m). Finally, *S. velutinum* and *S. equinum* were typical of lowland water courses, the first being preferably collected in brooks and streams and the second in large rivers.

These results, though preliminary, can be useful to depict a present day update of the distribution of black fly species in Piedmont, where Alpine hydroelectric plants and agricultural water needs in the Po plane have strongly altered stream ecosystems during the last 50 years.