

Preface

Black flies (Diptera, Simuliidae) are small but rather robust flies, well known for the specialised feeding habits of the females. The preimaginal stages are always associated with running water and may be found in flows ranging from tiny trickles to large rivers. As filter feeders, the larvae play a key role in river and stream ecology and are important members of the food web.

In many regions of the world, particular environmental factors have given rise to mass emergences of adult black flies, and the females of many species then actively seek a bloodmeal. Bloodsucking females are important pests and are vectors of disease organisms in humans and in both domestic and wild animals. Worldwide, they are directly responsible for serious economic losses and even deaths among cattle.

Within the context of medical and economic zoology, the Simuliidae are one of the best-studied groups of lotic insects. Adult black flies are able to transmit filarioid worms and blood protozoans to a wide range of vertebrates. In parts of the tropics, they are responsible for the transmission of *Onchocerca volvulus*, and onchocerciasis or “river blindness” is recognized as a major endemic disease, mainly in Africa and Central and South America.

Based on their medical and veterinary importance, black flies require increased scientific research, for example in the areas of morphological taxonomy, systematics, freshwater ecology, molecular biology, cytogenetics, parasitology, immunology, epidemiology, and pest management.

In 2004, the Simuliidae working groups of Central Europe and Great Britain met together to take part in an International Simuliidae Symposium, held from 15 to 18 September at the Humboldt-Universität zu Berlin, Germany. With 38 delegates from 16 countries (Austria, Belgium, Canada, Czech Republic, Finland, France, Germany, Great Britain, Italy, Lithuania, Norway, Serbia-Montenegro, Russia, Slovakia, Sweden, USA), this was the largest European meeting of its kind to be held. In total, 35 scientific presentations were given, with the emphasis predominantly on taxonomy and systematics, history, ecology, transmission of disease agents, medical and veterinary aspects, and control. These presentations stimulated discussions that took place not only during the breaks and the poster session but also continued into the evenings, with an interesting and lively interchange of ideas within a pleasantly relaxed social framework.

This welcome expansion in the number of participants and the range of the topics discussed has provided the impetus for the present volume, which contains some of the talks and other topics discussed at the Symposium. Summaries of all the oral presentations and the posters have been published in the *Deutsche Gesellschaft für allgemeine und angewandte Entomologie, Nachrichten* (2004, volume 18, pages 97–125) and also in the *Bulletin of the British Simuliid Group* (2005, number 23, pages 2–25). These papers reflect the present state of knowledge within the various aspects of simuliid research. I should also point out that not all the Symposium presentations are published here, as some have been submitted to other journals.

To maintain the impetus for scientific exchange and collaboration, it is planned to continue with this type of joint Symposium. The next such Symposium will take place in September 2006 in Novi Sad (Serbia-Montenegro).

Finally, it is a pleasure to acknowledge the financial and other support from the following organisations without which it would not have been possible to hold this Symposium: the Institute for Biology and the Institute for Tropical Medicine of the Humboldt-Universität zu Berlin, the Deutsche Forschungsgemeinschaft, and the Berlin Water Companies. Hall and Woodhouse (UK) kindly donated a quantity of their “Blandford Fly” beer. Publication of this special Supplement has been made possible by a grant from the Humboldt-Universität zu

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Doreen Werner



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Back row (from left to right): Prof Peter ZWICK (Schlitz, Germany), Dr John N. RAYBOULD (Bristol, UK), Dr D. Monty WOOD (Ottawa, Canada), Prof Roger WOTTON (London, UK), Dr Jörg GRUNEWALD (Tübingen, Germany), Dr Joachim REIDELBACH (Reutlingen, Germany), Dr Alfons RENZ (Tübingen, Germany), Dr Gunther SEITZ (Landshut, Germany), Mr Thierry MAHAUT (Gembloux, Belgium), Prof Jozef HALGOS (Bratislava, Slovakia), Prof Christian RIPERT (Bordeaux, France), Dr Rory POST (London, UK), Prof Robert CHEKE (Greenwich, UK), Dr František RETTICH (Prague, Czech Republic), Prof Rolf GARMS (Hamburg, Germany - unfortunately mostly hidden behind František RETTICH), Dr Jari ILMONEN (Helsinki, Finland), Dr Jonathon A. B. BASS (Dorchester, UK), Prof Peter H. ADLER (Clemson, USA).

Middle row (from left to right): Prof Björn MALMQVIST (Umeå, Sweden), Dr Adrian C. PONT (Oxford, UK), Dr Andreas KRÜGER (Hamburg, Germany), Dr Jan Emil RAASTAD (Oslo, Norway), Dr John DAVIES (Hoylake, UK), Prof Ladislav JEDLIČKA (Bratislava, Slovakia), Dr Matus KÚDELA (Bratislava, Slovakia), Dr Roger W. CROSSKEY (London, UK), Mr Rolf R. F. MEYER (Hamburg, Germany), Dr Mag Manfred CAR (Brunn am Gebirge, Austria).

Front row (from left to right): Dr Roberto PILANI (Crevalcore, Italy), Dr Doreen WERNER (Berlin, Germany), Dr Heide ZWICK (Schlitz, Germany), Dr Viera STLOUKALOVÁ (Bratislava, Slovakia), Dr María-Gloria BASÁÑEZ (London, UK), Mrs Rasa BERNOTIENE (Vilnius, Lithuania), Mrs M. SCI Aleksandra IGNJATOVIĆ ČUPINA (Novi Sad, Serbia & Montenegro).

Not in the photograph: Dr Aleksey YANKOVSKY (Saint Petersburg, Russia), Luis M. Hernández TRIANA (London, UK).

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