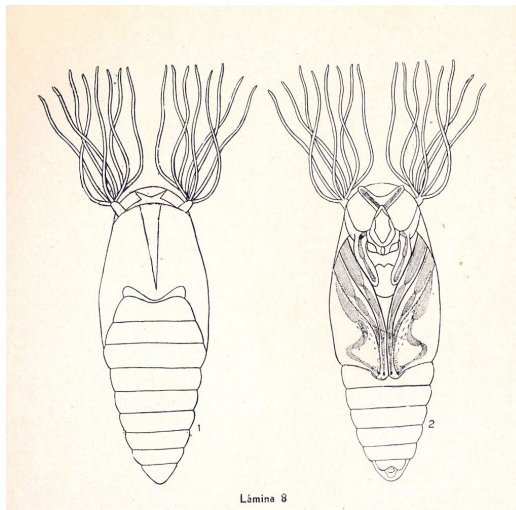


# The British Simuliid Group Bulletin

Number 43

January 2015



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# THE BRITISH SIMULIID GROUP BULLETIN

Number 43

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## CONTENTS

<b>From the Editor.....</b>	<b>1</b>
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### FORTHCOMING MEETINGS

<b>The Blackfly Working Group.....</b>	<b>2</b>
--	----------

<b>12<sup>th</sup>. Annual Meeting of the North American Black Fly Association (NABFA) .....</b>	<b>3</b>
--	----------

<b>33<sup>rd</sup> Meeting of the British Simuliid Group, Birmingham 15 June 2015.....</b>	<b>4</b>
--	----------

### MEETING REPORT

<b>VI International Simuliidae Symposium, Torino, 16-19 September 2014.....</b>	<b>5</b>
---	----------

### OBITUARY

<b>Dr Jörg GRUNEWALD (June 10, 1937 – June 18, 2014).....</b>	<b>11</b>
---	-----------

### End Pages

The British Simuliid Group  
The British Simuliid Group Bulletin  
Notes for contributors

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### Cover Image:

*Simulium* pupa. from page 53 in Vargas, Luis, 1945. *Simulidos del Nuevo Mundo. Monographia Num. 1, del Instituto de Salubridad y Enfermedades Tropicales, Mexico, D.F.*

## **From the Editor**

In this issue we have a report on the most successful VI Simuliidae Symposium held in Turin last September and a notice announcing the next British Simuliid Group Meeting to be held in Birmingham in June 2015. I would like to ask all members to try to make a special effort to attend, as it may be the last formal meeting of our group.

There are also notices of two other meetings of interest to simuliidologists which are about to take place very shortly.

Finally, an extensive Obituary of an old colleague and friend - Jörg Grunewald - who was lost to us last year. As editor of the *Bulletin* and on behalf of our members I extend our deepfelt condolences to his wife, Bärbel (known to anglophones as Barbara) whom many of us knew from working together in the field.

## **FORTHCOMING MEETINGS**

### **The Blackfly Working Group within the European Mosquito Control Association (EMCA Valencia, Spain 23-26th February, 2015**

Dear colleagues and friends involved in blackfly research, within the European Mosquito Control Association (EMCA), primarily focused to mosquito control and related subjects, the Blackfly Working Group was established back in 2004 in order to enable and promote the exchange of information and experiences in blackfly studies, especially in control topics. Since then, the organization of the separate session dealing with blackfly topics during the EMCA workshops became traditional.

In accordance with the permanently existing interests, the Organizing Committee of the next, 7th European Mosquito Control Association Workshop (EMCA, 2015) decided to dedicate a part of the program to the session on blackflies and their control.

Herewith, on behalf of the Organizing Committee, we are inviting scientists and professionals involved in the blackfly research, especially in control aspects to participate at the 7<sup>th</sup> EMCA Workshop and give their contribution to the success of the session and workshop.

For more information about EMCA and the 7th European Mosquito Control Association Workshop (EMCA, 2015), Valencia, Spain 23-26th February, 2015, please visit the following web pages:

<http://emca-online.eu> (sections „News“ and „Workshops“) or directly  
<http://www.emca2015.com/index.php/welcome>

**Dr Ruben Bueno**

President of the Organizing Committee of the 7<sup>th</sup> EMCA Workshop and EMCA National Director of Spain and

Dr Aleksandra Ignjatovic Cupina, Leader of the Blackfly Working Group and moderator of the BF session

**North American Black Fly Association (NABFA) 13<sup>th</sup> Annual  
Meeting  
19 - 20 February 2015**

Chair: John Walz; Vice Chair: Elmer Gray

Dates for the next North American Black Fly Association meeting are set for Thursday, February 19 and Friday, February 20th, 2015. The meeting will again be held at the University of Georgia, in Athens, Georgia. This venue provides an opportunity to visit the world's only colony of black flies that is maintained in our laboratories.

. <http://www.georgiacenter.uga.edu/uga-hotel>

As always, feel free to contact us with any questions or concerns.

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**33<sup>rd</sup> Meeting of the British Simuliid Group  
Birmingham 15 June 2015**

**[Note this date in your Diary]**

It is proposed to hold the 33<sup>rd</sup> meeting of the British Simuliid Group on Tuesday 16<sup>th</sup> June 2015, at Birmingham University.

The meeting title is: “Using The Simulium Genome Project” and the main session which is intended for anyone wishing to use the genome data for any purpose (taxonomy, ecology, functional genomics, etc.). will be chaired by Charles Brockhouse.

There will also be opportunity for papers on other blackfly related subjects to be presented.

We hope to hold the traditional pre-meeting dinner on the evening of Monday 5<sup>th</sup> June.

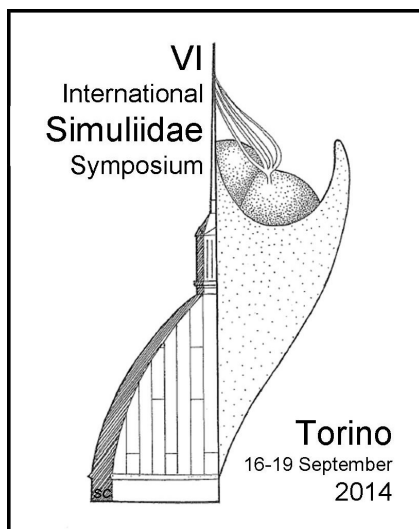
Anyone interested in participating can contact Charles Brockhouse at: [CharlesBrockhouse@creighton.edu](mailto:CharlesBrockhouse@creighton.edu) or [C.Brockhouse@bham.ac.uk](mailto:C.Brockhouse@bham.ac.uk) or contact John Davies at: [jaybeedee@gmail.com](mailto:jaybeedee@gmail.com).

Details will follow via the the Simuliidae list [SIMULIIDAE@JISMAIL.AC.UK](mailto:SIMULIIDAE@JISMAIL.AC.UK) and the Blackfly web site [blackfly.org.uk](http://blackfly.org.uk)

## MEETING REPORT

### VI INTERNATIONAL SIMULIIDAE SYMPOSIUM

**Torino, 16-19 September 2014**



### Summary

The VI International Simuliidae symposium was held on September 16-19 2014, at the Department of Life Sciences and System Biology of the University of Torino, in the fascinating venue of the Aula Magna, still presenting the paintings of the monastery once hosted in the building. The organization was possible thanks to the work of ENEA researchers and with the help of the Museum of Natural Sciences of Torino. Administrative aspects were followed by CISBA, an Italian association of environmental biologists.

The symposium was attended by 40 delegates, who listened to a total of 22 oral presentations, and watched the projection of one video. During the poster session, 13 posters were presented to the participants by the authors. The principal topics of the meeting were: the ecology of larvae and adults and their value as ecological indicators; the systematics of the

family with the last results in the application of molecular methods to detect the presence of sibling species; the state of the art of pest studies and pest control techniques; the zoogeography of the family with new areas of the world studied for the first time. All these themes were faced in a comprehensive way, with several presentations addressing to more than one. The presence of delegates from all over the world enriched the symposium with different experiences and original points of view. Particular interest was aroused by the *Lectio Magistralis* that opened the Symposium, when Prof. Leo Rivosecchi presented his life long researches on the Italian black fly fauna.

The social programme consisted in typical "aperitivi torinesi" (drink and handy food) at the end of each working day, and a social dinner on Thursday 18<sup>th</sup> in Piazza Vittorio Emanuele, the very centre of Torino, where traditional Piemonte dishes were served. The last day (19<sup>th</sup>) was dedicated to two visits in wonderful historical and cultural sites: the "Sacra di San Michele", a medieval monastery perched on the top of a hill dominating the ancient way to France, and the "Reggia di Venaria", hunting residence of the Italian Royal family, nowadays listed in the UNESCO World Heritage Sites.

Finally, for the organisers, I wish to acknowledge and thank all the organisations who supported us and in particular Valent BioSciences Corporation, the sponsor of the VI International Simuliidae Symposium.

## S. Ciadamidaro

### **Abstract Book**

An advance copy of the Abstract Book which contains a List of Participants, the Programme and Abstracts of Presentations is published on the blackfly web pages at URL: [www.blackfly.org.uk/recentbulls.htm](http://www.blackfly.org.uk/recentbulls.htm) where it can be downloaded or read on-line. A final version is expected to be published soon on the Museo Regionale di Scienze Naturali website at URL:

[www.mrsntorino.it/cms/il-museo/attivita-editoriale](http://www.mrsntorino.it/cms/il-museo/attivita-editoriale)

Notification will be made via the [Simuliidae@JISCMail.AC.UK](mailto:Simuliidae@JISCMail.AC.UK) forum.



**VII International Simuliidae Symposium 2016**

We are pleased to announce that Dr Ingacio Ruiz-Arrondo has re issued his invitation to hold the next symposium in Zaragoza. Unless we receive a competing invitation from someone else, we will assume that the 2016 meeting will be held in Spain.

Notification of details will be made through the  
SIMULIIDAE@JISCMAIL.AC.UK forum and future *Bulletins*

**PROGRAM****Tuesday 16 September**

16.00-18.00 Welcome and Registration at the University of Torino, Via  
Accademia Albertina 13

**Wednesday 17 September**

09.00-09.20 Welcome speeches

**Morning session (chairing: Aleksandra Ignjatović Čupina)**

- 09.20-10.10 **L. Rivosecchi**, S. Ciadamidaro and B. Maiolini: *Leo Rivosecchi, a lifelong passion for blackflies: the history of Simuliidae research in Italy*
- 10.15-10.40 **B. Maiolini** and M.C. Bruno: *Drift behaviour of blackfly larvae in controlled conditions*
- 10.45-11.15 Coffee break
- 11.15-11.40 **S. Ciadamidaro**, L. Mancini and L. Rivosecchi: *Blackflies (Diptera, Simuliidae) as ecological and landscape indicators of stream ecosystems in the urbanizing territory of Rome (Italy)*
- 11.45-12.10 **L.V. Petrozhitskaya** and V.I. Rodkina: *Spatial organization of stream insects of different feeding assemblages in watercourses of West Tuva, with particular emphasis on Simuliidae*

- 12.15-12.40 **A. Ortiz:** *Electrophysiological (EAG) responses of Simulium spp to human skin volatiles*
- 12.45-13.45 Lunch break

**Afternoon session (chairing: Bruno Maiolini)**

- 13.45-14.10 **L.M. Hernandez-Triana**, L.G. Chaverri, M.A. Rodriguez-Peréz, S. Prosser, P.D.N. Hebert, T.R. Gregory and N. Johnson: *Developing a DNA barcoding library for the identification of black flies (Diptera: Simuliidae) with emphasis on Mesoamerica*
- 14.15-14.40 **M. Kúdela**, T. Brúderová and P.H. Adler: *Blackflies of the Maritime Alps*
- 14.45-15.10 **T. Brúderová**, M. Kúdela and P.H. Adler: *Prosimulium hirtipes in Europe: does Prosimulium italicum exist?*
- 15.15-15.45 Coffee break
- 15.45-17.30 **Poster Session**

17.30 For those who wish, walk in the city centre and typical “aperitivo torinese” to have a drink together

**Thursday 18 September**

**Morning session (chairing: Peter Adler)**

- 09.00-09.15 **D. Werner** and H. Kampen: *The Citizen Science Project “MÜCKENATLAS”*
- 09.15-09.40 **D. Baldry:** *The large-scale mapping of blackfly breeding sites should be a prerequisite for blackfly control operation that use aircraft to disperse larvicides to targeted water-courses, based on experiences gained from the WHO Onchocerciasis control programme in West Africa*
- 09.40-10.15 **R.A. Cheke**, M.Y. Osei-Atweneboana, C. Wiafe and M.D. Wilson: *Living with the fly* (video)
- 10.15-10.40 **R.A. Cheke**, M.G. Basanez, M. Perry, M.T. White, R. Garms, E. Obuobie, P.H.L. Lamberton, S. Young, M.Y. Osei-Atwene-

- boana, J. Intsiful, D.A. Boakye and M.D. Wilson: *Onchocerciasis transmission and climate change in West Africa*
- 10.45-11.15 Coffee break
- 11.15-11.45 **P.H. Adler:** *How to make a simuliid pest*
- 11.50-12.15 **E.W. Gray,** P.H. Adler and C. Bramley: *Black flies and the Colorado river, USA – the Bullhead city experience*
- 12.20-12.45 **R.A. Cheke,** H.M. Dobson, R.R.F. Meyer, M.Y. Osei-Atweneboana and M.D. Wilson: *Blackflies and hydropower: the Bui dam problem on the Black Volta river, Ghana*
- 12.50-13.50 Lunch break

**Afternoon session (chairing: Elmer Gray)**

- 13.50-14.15 **S. Aibulatov:** *Contribution to the black fly fauna (Diptera: Simuliidae) of the Sakha Republik (Yakutia)*
- 14.20-14.45 **M.J. Vila-Viçosa,** A. Ignjatović Čupina, D. Petrić and H.C.E. Cortes: *Survey of the Simulium species (Diptera, Simuliidae) in Alentejo, South of Portugal*
- 14.50-15.15 M.J. Vila-Viçosa, A. Ignjatović Čupina, A. Giannelli, R.A.N. Ramos, F. Dantas-Torres, Y. Mutafchiev, E. Papadopoulos, L. Cardoso, D. Petrić and **H.C.E. Cortes:** *Observations on simuliids in Algarve, South of Portugal*
- 15.20-15.45 **B. Belqat** and P.H. Adler: *Update of the blackfly fauna of North-Africa (Diptera : Simuliidae)*
- 15.50-16.20 Coffee break
- 16.20-16.45 **A. Ignjatović Čupina,** A. Giannelli, H.C.E. Cortes, R.A.N. Ramos, L. Cardoso, R.P. Lia, D. Otranto and D. Petrić: *Notes on blackfly fauna of the Basento river (Basilicata, Southern Italy)*
- 16.50-17.15 **P. Pramual:** *Biodiversity of black flies (Diptera: Simuliidae) in Thailand*
- 17.20-17.45 **A. Ignjatović Čupina,** E. Papadopoulos, M.J. Vila-Viçosa, H.C.E. Cortes and D. Petrić: *Blackfly fauna of Macedonia (Northern Greece)*
- 20.00 Social dinner

**Friday 19 September**

**Conference excursion**

09.30	Departure from Torino by bus to visit the “ <b>Sacra di San Michele</b> ”
12.45	Lunch
14.15	Stop at the Metro station for those who are leaving in the afternoon
15.00-18.00	Visit to the “ <b>Reggia di Venaria</b> ”
18.00-19.00	Back in Torino

## OBITUARY

### **Dr Jörg GRUNEWALD (June 10, 1937 – June 18, 2014)**

Doreen WERNER<sup>1</sup>, Marc KARAM<sup>2</sup>, Robert A. CHEKE<sup>3</sup>, John N.  
RAYBOULD<sup>4</sup> and Helge KAMPEN<sup>5</sup>

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*Based on a German version which was published in Studia Dipterologica  
(WERNER et al. 2013 [2014]). [see References]*

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Dr Jörg GRUNEWALD (Fig. 1), internationally renowned as a blackfly specialist and member of the staff of the Institute of Tropical Medicine of the University of Tübingen, Germany, for many years, passed away aged 77 on June 18, 2014 in Tübingen after contracting a serious illness. The entomological community has lost a dedicated scientist and many colleagues have lost an esteemed friend. We lament a multifaceted personality of high reputation who was an inspiration to his and the following generation of scientists and who conveyed science in a special, often humorous, manner.

Within the fields of medical entomology and parasitology, Jörg GRUNEWALD's major scientific interests were the ecology, physiology, vector role and control of blackflies (family Simuliidae). His engagement in research and teaching and his enthusiasm for his special fields of research were extraordinary and made him a much-addressed scientist.

**Fig. 1**

Jörg GRUNEWALD.

Photograph: A. VOLLMER (2003).

He was also a dedicated ornithologist, but turned down a chance to pursue a career studying birds in favour of insects.

Jörg GRUNEWALD was characterized by external calmness and his life seemed to be in balance even though his professional ambitions were accompanied by ups and, particularly during the last decade of his active work, downs. His will and straightforwardness, coupled with his optimistic attitude, did not only inspire his family and friends but also numerous colleagues of various fields of research. His enormous workload and his tireless efforts put into the realisation of research projects (e. g. vector control programmes in Africa primarily supported and funded by the World Health Organization (WHO), the Deutsche Forschungsgemeinschaft (German Research Foundation, DFG) and by the University of Tübingen), his fervour as a lecturer within the scope of both teaching special zoology and medical entomology, and his supervision of young academics were exemplary.

Jörg GRUNEWALD was born on June 10, 1937 in Leipzig, Germany, as a son of the secondary school teacher Dr Fritz GRUNEWALD and his wife Dora

GRUNEWALD, née PITSCHEL. He grew up as the middle child of five siblings and spent his early youth in Leipzig and Steinau by the Oder River in a rural idyll which strongly influenced him and aroused his interest in nature, particularly in ornithology. As a consequence of the post-World War II chaos and several occupational transfers of his father, Jörg had to change school several times during his childhood. From 1943 to 1956, he attended primary school in Konstanz-Wollmatingen and secondary schools in Konstanz, Kehl and Radolfzell by Lake Constance. After graduation in 1956, he started to study zoology, botany, geography, physical education, philosophy and pedagogy at the University of Freiburg in southern Germany, with a short interval (1959) at the University of Kiel in northern Germany. After his practical exam in physical education (1959), Jörg passed the ‚Philosophicum‘, an examination mandatory for German students of natural sciences. Subsequently, he joined the Institute of Limnology of the University of Freiburg and, as a graduate assistant, participated in studies on European whitefish (*Coregonus wartmanni*) populations in the Black Forest lakes and on C14 assimilation of chlorophyceic algae in Falkau/Schwarzwald. In parallel, he prepared the first of two theses to be submitted for obtaining the teaching degree for secondary schools, entitled “Systematik und Ökologie der Larven und Puppen der Simuliidae (Dipt.) des Süd-Schwarzwaldes und seiner Randgebiete” (“Systematics and ecology of the larvae and pupae of the Simuliidae (Dipt.) of the southern Black Forest and its peripheral areas”), supervised by Professor Dr Wolfgang WÜLKER. The thesis was accepted in November 1963 with an excellent grading. Enthusiastically, Jörg communicated his research results to colleagues and was looking for like-minded persons interested in simuliid research. The simuliid material collected by Jörg GRUNEWALD in the southern Black Forest over the years is presently being prepared for transfer to the Natural State Museum of Stuttgart, the capital of the German federal state of Baden-Württemberg.

In 1965, Jörg passed his first state examination – the scientific examination for the teaching degree for secondary schools – at the University of Freiburg in the subjects of biology, geography and physical education. In the two following years he spent an obligatory teaching traineeship at the secondary school of Neustadt (Black Forest) and at the Goethe Secondary School in Freiburg. Based on his second examination thesis “Der See als Lebensraum. – Die didaktische und methodische Behandlung des Ökosystems “See” im Biologie-Unterricht der Oberstufe” (“The lake as a biotope. – Addressing the ‘lake’ ecosystem didactically and methodologically in the biology lessons of senior classes”), he qualified for the second state examination, the pedagogic examination for the teaching degree for secondary schools.

Despite being a passionate teacher, Jörg did not spend the following years at school but followed his exploratory urge and became research assistant at the Institute of Tropical Medicine of the University of Tübingen in 1967. During this period, he prepared his doctoral thesis "Die hydrochemischen Lebensbedingungen der präimaginalen Stadien von *Boophthora erythrocephala* DE GEER (Diptera, Simuliidae) im Freiland und die Entwicklung einer Zucht unter experimentellen Bedingungen" ("The hydro-chemical living conditions of the immature stages of *Boophthora erythrocephala* DE GEER (Diptera, Simuliidae) in the field and its laboratory colonization under experimental conditions"). In 1972, Jörg received his Ph.D.

Already during his time as a research assistant in Tübingen and supported by the WHO, Jörg repeatedly spent several months at various research institutions in Africa (Upper Volta (now Burkina Faso), Liberia, Cameroon) to work on the biology and ecology of *Simulium damnosum* s. l. (Diptera), the vector of the causative agent of onchocerciasis. On behalf of the WHO he carried out research work at the 'East African Institute of Malaria and Vector-borne Diseases' in Amani, Tanzania, in 1971, where John Raybould was also stationed. Supported by the DFG, Jörg returned to this institute in 1973 and stayed until 1975. Again, he dealt with various problems on the biology and ecology of simuliid vector species and with the laboratory maintenance of species of the *Simulium neavei* group and the *Simulium damnosum* complex. In 1976, this was followed by visits to Ivory Coast, Ghana, Upper Volta and Togo as a WHO consultant for studies on the hydro-chemical living conditions of some West African cytospecies of the *Simulium damnosum* complex and on the water quality in simuliid breeding habitats within the framework of the "Onchocerciasis Control Programme". Studies on the feeding and reproductive biology of *Simulium damnosum* s. l. led Jörg's way to Togo to the 'Institut National d'Hygiène' (formerly Ernst Rodenwaldt-Institute) in Lomé in 1979.

Together with Professor Dr Walter RÜHM, Jörg GRUNEWALD was one of the initiators of the (initially German-language) Simuliidae symposium, a forum for information exchange on current studies and planned projects among German-speaking scientists working on simuliids and for students to practice giving scientific talks in front of a small familiar audience. The first meeting took place in September 1980 at the University of Hamburg. Jörg GRUNEWALD participated in these symposia every time he was in Germany. In 2004, this symposium became an international event. It still takes place biannually as the „International Simuliidae Symposium" providing a platform for exchange of experiences and knowledge transfer for young researchers.



His desire to pass on his knowledge and his passion for the field of medical entomology/zoology made Jörg GRUNEWALD submit a (cumulative) habilitation thesis<sup>1</sup> to the faculty of biology at the University of Tübingen in 1980. His works on the hydro-chemical and physical conditions required by the species of the *Simulium* (*Edwardsellum*) *damnosum* complex to develop, formed the central topic of this thesis which was defended before the faculty by Professor Dr Peter WENK. In the very same year, Jörg GRUNEWALD was habilitated and received the *venia legendi* ("permission to give lectures") for the field of zoology. In 1981, he became a permanent research fellow at the Institute of Tropical Medicine of the University of Tübingen and in 1984 head of the working group „medical entomology“. The university granted him leaves of absence from 1981 to 1983 and from 1987 to 1988 for further work in western Africa (Benin, Burkina Faso, Ivory Coast, Ghana, Guinea, Guinea-Bissau, Mali, Niger, Senegal, Sierra Leone, Togo). During these periods, Jörg GRUNEWALD was active again for the WHO as a research coordinator in the „Onchocerciasis Control Programme“ (OCP) and led a group of up to 44 staff. During this period he was responsible for administering the contracts of numerous consultants hired by OCP for a plethora of different topics and he was always sympathetic and helpful in resolving any problems that they encountered. Based in Ouagadougou, he was always a friendly and welcoming face in the OCP office and out-of-hours he had plenty of scope for walking his beloved dogs with his wife Bärbel (known as Barbara to Anglophones) and for bird-watching.

After his return to the Institute of Tropical Medicine of the University of Tübingen in 1989, Jörg continued his blackfly and mosquito (family Culicidae) research, although he switched to the Institute of Hygiene of the same university in 1997. During the following years, Jörg focused on work in Mali within the WHO „Malaria Control Programme“ in the framework of which he dealt with mosquito population dynamics, studied the impact of impregnated bednets on the epidemiology of malaria and explored the use of neem products as natural larvicides for *Anopheles* mosquitoes. In addition to stays in Mali, Jörg visited several other African countries (e.g. Uganda), but also Vietnam and various countries in South America. Although in 2002, Jörg GRUNEWALD celebrated his retirement, he did not become inactive. He remained engaged in regular exchanges with colleagues, in teaching and supervising students in theory and practice at various places such as the University of Tübingen and the Institute for Tropical Medicine and the Institute for International Health of “the Charité” - (Universitätsmedizin Berlin, a joint institution of the Freie Universität Berlin and the Humboldt-Universität in Berlin).

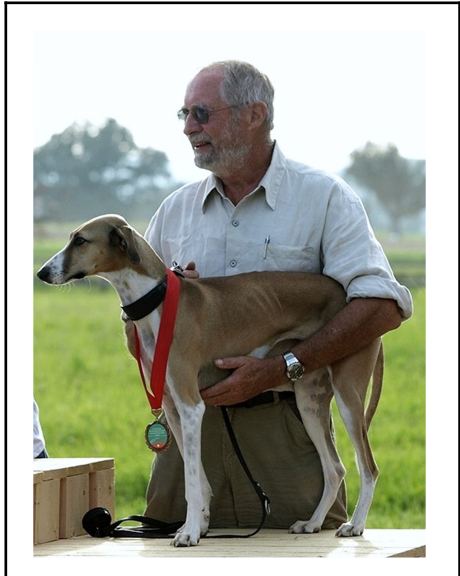
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<sup>1</sup>“Habilitationsschrift” A thesis required to obtain the qualification for teaching at the postdoctoral level.

Jörg GRUNEWALD fostered a friendly relationship with his colleagues and students. Knowledge transfer was one of his most important endeavours. When distributing study and working topics he was always willing to address the ideas of his colleagues and students in order to make them curious for further fields of research. His relationship with them was characterized by faith and respect. However, he did not only respect his colleagues but all his fellow human beings – irrespective of their social rank – with whom he spent part of his time, which was particular effective in Africa. His Malian name "Ousmane Tembely" (a widespread name of the ethnic group of the Dogon), which Jörg received from his Malian colleagues and with which he was also addressed by the population of the Malian region of Mopti, was an expression of the highest appreciation.

Jörg GRUNEWALD was not one of the scientists who followed each new trend just because it was new. Instead, with all his personality he supported fields of work whose importance he recognized. While his numerous activities as a scientist with research assignments at home and abroad as well as a supervisor of internship, master and doctoral theses undermined his strength, he found rest and collected new energy among his family and friends. His special love was for his wife Bärbel, née RUTTNER, whom he had become acquainted with at the beginning of his scientific career in Falkau where he worked for the Institute of Limnology of the University of Freiburg. Bärbel was very appreciative of Jörg's scientific passion and supported her husband wherever possible. Jörg's family and his various private interests such as the keeping and breeding of African Azawakh dogs, African art and culture, travelling, ornithology, botany and literature occupied firm places in his life. Although his health was not the best anymore during his last years, he indulged himself with one of his passions – his dogs Imsad und Mouhana (Fig. 2) which he escorted to dog races all over Europe.

High credit is due to Jörg GRUNEWALD for his professional and social engagement, not least because he understood how to create a peaceful climate around him. Estimating his personality would not be complete without speaking about the person Jörg GRUNEWALD. Helpfulness, faith, honesty, candidness and, above all, a sense of justice belonged to his character which made him well-liked and which each of us was allowed to experience for him-/herself. The charisma of his personality and the extent of his knowledge may be appreciated only by those who had the privilege to accompany him on parts of his path of life. Jörg was a calm natural scientist who found deepest satisfaction and self-fulfillment in his work. His enthusiasm for many topics, the examples he was setting and his



**Fig. 2:** Jörg GRUNEWALD with his Azawakh dog Mouhana.

Photograph: B. GRUNEWALD (2007).

complete scientific works will not only live on in applied simuliid research. The funeral eulogy of his colleague and friend Dr Marc KARAM states: "I know that you always had Africa in your heart, and when you left the Onchocerciasis Control Programme in 1989, your subsequent activities in the malaria project in Mali continued your contribution to health improvement in the African continent." Jörg GRUNEWALD gave us a lot – we will miss him.

### Acknowledgments

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## Compilation of scientific articles published by Jörg GRUNEWALD:

Note: The article marked with an asterisk (\*) could not be reviewed in its original form. The source was adopted from Jörg GRUNEWALD's inheritance.

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At present the BSG has about 130 recorded members in the UK, Europe, Africa, Australia, New Zealand and the Americas. Membership is FREE - there are no restrictions. If you are not already a member of the BSG and you wish your interest to be known, all you have to do is send your name and postal and e-mail addresses to the editor at [jaybeedee@gmail.com](mailto:jaybeedee@gmail.com). Annual meetings have been held at different locations in the UK since 1978. Abstracts of papers presented are published in our *Bulletin* which is now available for downloading from the internet.

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Inquiries about the Group and its activities should be made to John Davies: address on the back cover and e-mail: [jaybeedee@gmail.com](mailto:jaybeedee@gmail.com)

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