

SOCIETY OF VECTOR ECOLOGISTS

Programme & Abstracts
of
Offered Papers

Second Meeting of the
EUROPEAN SOCIETY OF VECTOR ECOLOGISTS



31st August — 2nd September 1987
Zoological Institute of the University of Heidelberg

The Society of Vector Ecologists

FACTS

For additional information write to

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Why have a Society of Vector Ecologists?

Until The Society of Vector Ecologists was developed, no single organization was devoted to all phases of *Vector Ecology*. While some organizations are devoted to specific phases of *Vector Ecology*, others touch upon the subject only as a response to the special interest of a few of its members. *The Society of Vector Ecologists* encompasses all areas of *Vector Ecology* and includes people from such groups as Mosquito Abatement Districts, Health Departments, Agricultural Departments, Fish and Game Departments, Universities, Armed Forces, and private industry.

What is the purpose of this organization?

The purpose of *The Society of Vector Ecologists* is to encourage the study and suppression of disease and nuisance vectors through environmental management and the conservation of water, land, and reusable waste products of man's endeavors. In addition *The Society* aims to develop the highest possible ethical and professional standards, in which its members can pool their knowledge in a dedicated effort to provide the greatest possible service to all persons affected by the health hazards and nuisances caused by vector species.

What is a Vector Ecologist?

A *Vector Ecologist* studies the environmental interrelationships of arthropods and other animals of public health importance as a basis for devel-

oping improved prevention and control measures. He is concerned with arthropods and other animal species which adversely affect the health, comfort, mental equanimity of man, and the full use of his environment. A *Vector Ecologist* uses scientific methods and develops programs for the suppression of vector populations based on environmental management and the manipulation of vector growth and behavior patterns aided by appropriate biological, engineering, and chemical technology.

Who may join this organization?

All persons interested in *Vector Ecology* may become members of *The Society*. Membership is divided into four classifications (*Regular, Honorary, Affiliate-Graduate Membership, and Student Membership, and Sustaining Membership*). Detailed information concerning each type of membership may be found in *Article III of the Constitution and By-Laws*.

What benefits would I derive by being a member of this organization?

Many of the benefits of membership are directly related to the communication of pertinent information between members. This informational exchange would include direct association with others in your profession through meetings, seminars, and workshops. Ultimately, there will be a wider distribution of information through appropriate publications. Also, as a member of a unified group, you would be able to help guide the positive development of professional ethics and standards in the field of *Vector Ecology*.

SECOND MEETING OF THE
EUROPEAN SOCIETY OF VECTOR ECOLOGISTS

ZOOLOGICAL INSTITUTE OF THE UNIVERSITY OF
HEIDELBERG, 31st August - 2nd September

Monday 31st August

- 8⁰⁰ - 9⁰⁰ Registration
- 9⁰⁰ - 9¹⁰ Call to order and announcements
N. Becker, Regional Coordinator of the SOVE
KABS, Ludwigshafen, West Germany
- Chairman: N. Becker
- 9¹⁰ - 9²⁰ Welcome address of the SOVE President
- 9²⁰ - 9³⁰ Welcome address to Heidelberg
Prof. Dr. H.W. Ludwig, Zoological Institute,
University of Heidelberg
- 9³⁰ - 9⁴⁰ Welcome address of the President of the Mosquito
Control Association of West Germany
Regierungspräsident Dr. Paul Schädler,
Regierungspräsidium Neustadt, West Germany
- 9⁴⁰ - 10⁰⁰ History and Development of Bacillus thuringiensis
H-14, its suitability and safety for community use
Robert I. Rose, Consultant for Biotechnology
Development, Brussels, Belgium
- 10⁰⁰ - 10³⁰ Ecological basis of mosquito control - joint action
of selective larvicides and natural predators
Mir S. Mulla, Department of Entomology, University
of California, Riverside, California, USA
- 10³⁰ - 11⁰⁰ COFFEE

- (11⁰⁰-11²⁵ Binding of the Bacillus sphaericus mosquito larvicidal toxin to insect cells in vitro
Elisabeth W. Davidson, Constance Shellabarger,
Marian Meyer, Allan L. Bieber, Department of
Zoology and Department of Chemistry, Arizona State
University, USA)
- 11²⁵-11⁵⁰ The mechanism of monolayer anoxia of mosquito juveniles
A.I. McMullen, University of Southampton, UK
- 11⁵⁰-12¹⁵ Mosquito control in Czechoslovakia
Frantisek Rettich, Institute of Hygiene and
Epidemiology, Prague
- (12¹⁵-12⁴⁰ Stechmückenbekämpfung - Notwendigkeit und Grenzen aus hygienischer Sicht
Wolf-Hugo Just, Hygiene Institut, Eberswalde-Finow, DDR)
- 12⁴⁰-14⁰⁰ LUNCH
- Chairman: E. W. Davidson
- 14⁰⁰-14³⁰ Film: Mosquito and black fly control with B.t.i
BASF: M. Baier, W. Krieg; KABS
- 14³⁰-14⁵⁵ Hydrodynamics of feeding of larval Simuliidae
Douglas A. Craig, University of Alberta, Edmonton, Canada
- 14⁵⁵-15²⁰ Black fly control in different parts of West-Germany with the biological larvicide Bacillus thuringiensis var. israelensis (B.t. H-14)
Deschle W.E., J. Rutschke, H.E. Hagen, M. Stamer, Th. Meyer, Tropenmedizinisches Institut der Universität Tübingen, West Germany
- 15²⁰-15⁵⁰ COFFEE
- 15⁵⁰-16¹⁵ The control of Simulium damnosum s.l. (Diptera, Simuliidae) in two areas of Onchocerciasis in Cameroon with Bacillus thuringiensis H-14
Rutschke, J. & W. Deschle, Tropenmedizinisches Institut der Universität Tübingen, West Germany

- 16¹⁵-16⁴⁰ Vector control public education program in Orange County, California
B. Fred Beams, Orange County Vector Control District, Santa Ana, California, USA

Tuesday 1st September

Chairman: Ch. Dahl

- 8⁰⁰- 8²⁵ The perplexing ecology and control of malaria in Swaziland. Russell E. Fontaine, Davis Ca, USA
- 8³⁵- 8⁵⁰ A new isolate of Vavraia culicis (Microsporida) from Anopheles mosquitoes as a pathogen for malaria control?
Maier, W.; Weyler, Dorothee; Schenker, Waltraud; Seitz, H.M.; Institut für Medizinische Parasitologie der Universität Bonn, West Germany
- 8⁵⁵- 9¹⁵ Evaluation of experimental ultra low volume (ULV) treatments of Bendiocarb and Malathion for mosquito control in Vojvodina, Yugoslavia
Z. Srdic, M. Zgomba, D. Petric - C.Boase, J. Hurrell, University of Novi Sad, Yugoslavia
CAMCO, Chesterford, UK
- 9¹⁵- 9⁴⁰ Field efficacy of some insecticides against chironomid larvae
Gilbert Sinigre, E.I.D.L.M., Montpellier, France
- 9⁴⁰-10⁰⁵ COFFEE
- 10⁰⁵-10³⁰ Recent Results of Hantavirus seroepidemiological studies in West Germany
J. Pilaski¹, R. Peceny¹, O. Gorschewsky¹, L. Zöller², V. Kraft³, H.W. Lee⁴
1) Medical Institute of Environmental Hygiene, Düsseldorf, West Germany, 2) Ernst-Rodenwald Institut, Koblenz, West Germany, 3) Central Institute for Laboratory Animal Breeding, Hannover, West Germany, 4) WHO, Collaborating Centre for Korean Haemorrhagic Fever, Seoul, Korea
- 10³⁰-10⁵⁵ Saint Louis encephalitis in metropolitan Southern California, USA
Charles M. Myers, California Department of Health Services Vector Surveillance and Control Branch, Los Angeles

10⁰⁰-11⁰⁰ Studies on the fibroins of Simulium ornatum
A.I.McMullen and M. Ladle, University of
Southampton & Freshwater Biological Assn.,UK

11⁰⁰-13⁰⁰ LUNCH

13⁰⁰-17⁰⁰ Excursion to the BASF Agricultural Research
Centre

19⁰⁰ Business Meeting of the Society

Wednesday 2nd September

Chairman: J. Margalit

8⁰⁰- 8²⁵ Crossing experiments between members of the Culex
pipiens complex (Diptera: Culicidae)
T. Kruppa, Bernhard-Nocht-Institut für Schiffs- und
Tropenkrankheiten, Hamburg, West Germany

8²⁵- 8⁵⁰ Suspension feeding in culicid larvae
Ch. Dahl, Zoological Institute, Section of Entomology,
University of Uppsala, Sweden

8⁵⁰- 9¹⁵ Blood meal utilisation in Aedes and Anopheles -
a quantitative comparison
Hans Briegel, Department of Zoology, University of
Zürich, Switzerland

9¹⁵- 9⁴⁰ Seasonal and daily activity of some mosquito
species (Dip. Culicidae) in Vojvodina, Yugoslavia
D.Petric, M. Zgomba, Z. Sridic - C. Boase, J.
Hurrell University of Novi Sad, Yugoslavia
CAMCO, Chesterford, UK

9⁴⁰-10⁰⁰ Ecology of plague in the vicinity of Los Angeles,
California
Mino B. Madon, California Department of Health
Services Vector Surveillance and Control Branch, Los
Angeles, California

10⁰⁰-10³⁰ COFFEE

- 10³⁰-10⁰⁰ Ecology of Cyclopoid Copepodes and epidemiology of Guinea Worm in West Africa
Karl Steib , Institut für Tropenhygiene,
Universität Heidelberg, West Germany
- 10⁰⁰-11²⁰ Schistosomiasis: The contribution of immunodiagnosis to the control of a snail-born disease
Idris, M.A.²; Dell, R.¹; Shi, Y.E.³; Ruppel I
1: Institute for Tropical Hygiene, University of Heidelberg, West Germany 2: Department for Zoology, University of Khartoum, Sudan
3: Department of Parasitology, Tongji Medical University, Wuhan, P.R. China
- 11²⁰-11⁴⁵ Aids - Epidemiological background and possibility of transmission by arthropods
M. G. Koch, Karlsborg, Sweden
- 11⁴⁵-12¹⁰ On the transmission of blood microfilariae of weaver birds by insects in the Sudan
M. A. Idris, Department of Zoology, University of Khartoum, Sudan
- 12¹⁰-14⁰⁰ LUNCH
- 14⁰⁰ Excursion to the Upper Rhine Valley
- Post mortem of the 2nd European SOVE meeting. Place of next meeting to be discussed.
N. Becker, Zoological Institute, Heidelberg

POSTER SESSION

Laboratory bioassays of both Bacillus sphaericus and Bacillus thuringiensis against mosquitoes in Cukurova District, Turkey

Ali Matur and Kemal Ceber, Cukurova University, School of Medicine, Medical Biology Dept., Balcali, Adana, Turkey

Periodical variation in spatial distribution of Aedes larvae (Diptera: Culicidae) in the South Yamal

N. V. Nikolaeva, Institute of Plant and Animal Ecology, Ural Science Centre of Academy of Sciences of the USSR, Sverdlovsk, USSR

Chemical and Mechanic Control of Honey-bee mite Varroa jacobsoni Quedmans

Özer, N., Bosgelmez, A., Hacettepe University Science Faculty, Biology Dept. Beytepe-Ankara, Turkey

Biological evaluation of an asporogenic mutant of Bacillus thuringiensis serovar. israelensis

W. Krieg¹, K.F.Jäger¹, A.Parg¹, J. Delzer¹, H. Weisser²

¹) BASF AG, Crop Protection Division, Limburgerhof, West Germany

²) Institute of Microbiology, University of Tübingen, West Germany

Environmental management in the Upper Rhine River Valley - an example of mutual interest of natural conservation and mosquito control

M. Backes, Kommunale Aktionsgemeinschaft (KABS), Ludwigshafen, West Germany