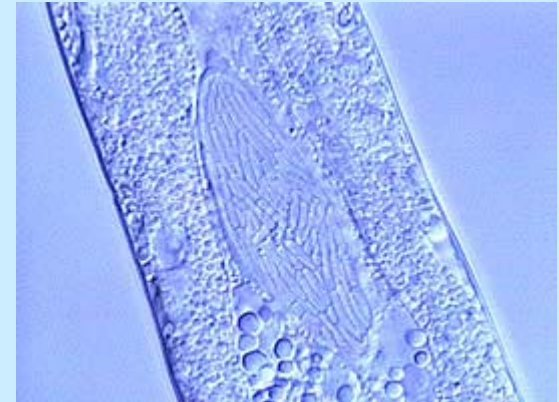


COST Action 850

Biocontrol Symbiosis

Achievements

Ralf-Udo Ehlers
University of Kiel, Germany



The network existed:

COST Action 850 had precursors

COST 812

**„Cold-active lines of insect-parasitic nematodes“
(Sept. 1990 – Dec. 1993)**

COST 819

**„Entomopathogenic Nematodes“
(May 1994 – May 2000)**

At this place we got started. COST 819 had ended and most of us were pessimistic about getting a third round with COST



But we were successful. Noel and myself were sitting in front of the technical committee and told them that the support of COST helps to build Europe.

Have we succeeded?



We very soon integrated Eastern European Countries (HU, CR, POL, BUL) already during 812

Israel participated

Sergei Spiridonov (Moscou) and Naim Iraki (Bethlehem) were associated

COST:

Provides funds to organize meetings

Provides funds for publications

Provides funds for Short Term Scientific Meetings

How did we use them?

COST 850 STSMs:

23 Missions supported, reports on **WEBPAGE**

Thanks to Solveig for management

Thanks to reviewers

Only the unbureaucratic handling made possible the maximum exploitation of the resources when they were available

Year	Number of STSM	Total budget
2001	2	3000
2002	5	7500
2003	0	0
2004	7	10340
2005	7	15273
2006	2	5000
Total	23 in total	41113

Name	Origin	Host	period	budget
Ana Marton	University Barcelona	University Kiel	8/10-31/10-2001	1500
Judit Marokhazi	University Budapest	University Bath	14/10-14/11-2001	1500
Damien O'Halloran	University Maynooth	Scottish Crop Research Inst.	14/01-4/02-2002	1500
Revital Bronstein	University Tel Aviv	University Giessen	20/01-19/02-2002	1500
Amos Navon	Volcani Center	University Kiel	8/04-16/04-2002	1500
Markus Riegler	University Vienna	Inst.Biol.+Biotechn.Heraklion	9/07-27/07-2002	1500
Oreste Triggiani	University of Bari	Entomol. Inst.Ceske Budejovice	13/10-20/10.2002	1500
Melita Zec-Vojinovic	University of Helsinki	University of Kiel	14/06-6/07-2004	2000
Pavel Hyrsl	Masaryk University CZ	University of Kiel	12/07-11/08-2004	792
Eustachio Tarasco	University of Bari	University of Kiel	15/06-30/06-2004	2000
Minshad Ali Ansari	University of Gent	University of Montpellier	1/03-7/03-2004	881
Songbi Chen	Volcani Centre	University of Aberdeen	11/10-8/11-2004	2000
Hilton Mc Weeny	University Maynooth	University of Bath	1/10-31/10-2004	1477
Marieke Prins	Plant Research International NL	University of Neuchatel	8/11-28/11-2004	1190
Sibylle Schroer	University of Kiel	Imperial College	20/02-20/03-2005	2000
Dorota Tumialis	Warsaw Agricultural University	Koppert Biological Systems NL	22/02-22/03-2005	1900
Muzeyen Mohammed	University of Gent	University of Kiel	29/03-31/05-2005	2500
Benedikt Kurtz	University of Kiel	Plant Protection Service HU	23/04-23/07-2005	2484
Lemna Ebssa	University of Hannover	University of Aberdeen	20/07-16/08-2005	2000
Siozios Stefanos	University of Ioannina	University of Wales	1/08-31/10-2005	2500
Zoe Mulroy	University Maynooth	Scottish Crop Research Institute	27/09-30/11-2005	1889
Maria Del Martinez	IEBIO S.L. Spain	University of Kiel	7/01-7/03-2006	2500
Vladimir Puza	Institute of Pomology CZ	University Maynooth	15/01-27/02-2006	2500

Working Group 1:

Biocontrol Symbiosis

Summarized by Kostas Bourtzis (Wolbachia) and David Clarke (nematode symbionts)

With increasing availability of genetic tools we will progress even more in the future

Working Group 2:

Bio-active Molecules

Summarized by Richard ffrench-Constant

Symbionts are an emerging source for interesting molecules and genes

In 2005, COST 862 „Bacterial Toxins for Insect Control“ was started

Those working on the symbionts can continue the network

Working Group 1 and 2 workshops:

2001, August 30-31:

Workshop: Bio-active molecules

Plant Research International, Wageningen, The Netherland

2001, July 7-9:

Workshop: Biocontrol Symbiosis

Orthodox Academy of Crete, Kolymbari, Crete, Greece

2005, July 15-17:

Workshop: Genomics and symbiotic interactions between micro-organisms and their helminthic or invertebrate hosts

Orthodox Academy of Crete, Kolymbari, Crete, Greece ([WEBPAGE](#))

Working Group 3: Biotechnology

2003, April 3-6:

Workshop: Molecular identification and taxonomy of undescribed species of "Long-dauer juvenile phenotype" from Europe and Southern Mediterranean Regions

University Budapest and Debrecen, Hungary ([WEBPAGE](#))

2002, April 26-2:

Working Group Meeting „Potential use of EPN to control Hazelnut Weevils“

IBMA and Grower´s Organisation, Bordeaux Merignac, France

2003, May 23-24:

COST 842 and 850 Joint Working Group Meeting: "Fungi and Nematodes: Safety and Risk Assessment,,

University Kiel, Schloss Salzau, near Kiel, Germany ([WEBPAGE](#))

Working Group 3: Biotechnology

2004, May 02-05:

**Working Group 3 + 4 Meeting: USE of EPN to Control Grubs in Turf
Agricultural Research Centre, 9820 Merelbeke, Belgium ([WEBPAGE](#))**

2004, July 31:

**Workshop: Entomopathogenic Nematode Application (adjacent to SIP)
University of Helsinki, Finland ([WEBPAGE](#))**

2004, October 18:

**Working group Meeting: Slug Control Meeting
Aberdeen University, Scotland UK ([WEBPAGE](#))**

Working Group 3: Biotechnology

2004 October 27:

**Workshop: Nematodes for mushroom fly pest control
Horticulture Research International, Wellesbourne, UK**

2004, November 5-6:

**WG 3 and 5 Meeting: Evaluation of Risks Related with the Use of EPN
and Discussion on Requirements for Registration of Invertebrate
Biocontrol Agents
University Kiel, Germany ([WEBPAGE](#))**

2005, April 23-24:

**Workshop: Biological control of thrips, with special emphasis on the
use of entomopathogenic nematodes
University Hannover, Germany([WEBPAGE](#))**

Working Group 3: Biotechnology

2005, June 10-11:

**Workshop "Novel Use" (adjacent IOBC/WPRS WG "Insect Pathogens and Insect Parasitic Nematodes,,
University Bari, Locorotondo (Bari), Italy ([WEBPAGE](#))**

**Publication of QC book (Merelbeke Workshop COST 819 in 1998):
Grunder Jürg M. (2005). QUALITY CONTROL OF
ENTOMOPATHOGENIC NEMATODES.**

Working Group 3:

Achievements – new applications

Control of Hazelnut Weevil this year tested in commercial scale

Control of Thrips in Greenhouses progressing

Use in orchards (Codling Moth, Rootborer) with promising results

Promising field results in *Diabrotica* control

Large scale use of EPN in forests against *Hylobius abietis*

Slug nematodes used on commercial scale in vegetables

Attempts to use EPN on foliage progressing

Working Group 3:

Achievements – industry

Stable and continuous supply with several EPN species

Much improved quality mainly due to better formulation

Improved transport logistics

Two workshops to review potential risks

European network prevented inclusion of EPN into Dir. 91/414

Costs for EPN products down more than half

Large scale producers down to three

Industry sponsored start of webpage

WG 4: Interaction with field biota

2001, August 30:

Ad hoc discussions about WG4 activities during 2nd MCM

2001, November 30 – December 1:

“Kick Off” Workshop

Royal Veterinary and Agricultural University, Copenhagen, Denmark

2002, January 10-12:

Ad hoc discussions about future workshop during 3rd MCM

Einsiedeln, Switzerland

2002, June 14-15:

Working Group Meeting: “Nematode Ecology and Molecular Techniques”

Instituto Canario de Investigaciones Agrarias, Tenerife, Spain

WG 4: Interaction with field biota

2004, February 21-22:

**Working Group Meeting: Inundative and Inoculative Release and Persistence of EPN in Forest and Agriculture Environments
University of Aberdeen, Scotland, UK ([WEBPAGE](#))**

2005, January 14-17:

**Working Group Meeting: Natural Occurrence and Evolution of EPNs
Institute of Entomology
Academy of Sciences, České Budějovice, Czech Republic ([WEBPAGE](#))**

Working Group 5:

Socio-economics

Summarized by Giovanna Curto

Communication in COST850

Initiative for webpage (thanks to Jürg Grunder)

Communication with industry and academia

Communication with extension services

WG 5: Socio-economics

2001, May 25-27:

Working Group Meeting WG 3 and 5: Initiation of internal and external communication

Christian-Albrechts University Kiel, Germany

2002, January 10–12:

Workshop: Challenges of internal co-operation, communication with all stakeholders

Swiss Federal Station, Einsiedeln, Switzerland

Meetings in Italian Society of Nematologists and in Spain to transfer the knowledge to other parties

Participation in activities related to safety and regulation

Publication:

Download PDF: [COST850brochure.pdf](#) (737 KB)

QC book

We need a printed version of our final summary

COST – Ups and Downs

**EU Commission support was not predictable
When you had your system running, you could make
good use of available funds
Now they are limited again and we can do less**

**Great Support from COST office
Thanks to Bouktje Stol and Roel Mulder**

COST – Advantages

Great to build networks

We have friends all over Europe now

We experienced different countries and cultures

We enjoyed the travel to different places

We learned to cooperate with European partners

Several EU projects started within our Actions

COST provided the basis for confidence

Industry benefits from network

COST – Criticism ?

For me there was never enough money

COST – Proposals for improvement

COST should reach more people

Employ professionals to spread results

Policy makers should use network

COST – Future

The network exists - we will continue to use the contacts

Support for EPN research is less today

Framework 6 „Food safety“

Cut on funding for agriculture

It was a great experience to work with all of you – Thank you





COST – Future

The network exists - we will continue to use the contacts

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