



ENDURE

European Network for Durable Exploitation of crop protection strategies

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Glossary

ACRONYM	NAME
AFIPP	Association Francophone Internationale de Protection des Plantes
AMPP	Association Marocaine de Protection des Plantes
AGROS	Agroscope Swiss Federal Research Station
AU	Aarhus University, Denmark
CARBAP	Centre Africain de Recherche sur Bananiers et Plantains, Cameroun
CGIAR	Consultative Group on International Agricultural Research
CRRA	Centre Régional de Recherche Agronomique, Régional Centers of INRA-Morocco
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement
COLEACP	Comité de Liaison Europe-Afrique- Caraïbes-Pacifique
CNR	Consiglio Nazionale delle Ricerche, Italy
CSB	Case Study Banana
CTA	Technical Centre for Agricultural and Rural Cooperation ACP-EU
EC	European Commission
EMBRAPA	Empresa Brasileira de Paesquisa Agropecuária, Brazil
EPPO	European and Mediterranean Plant Protection Organization
ERA	European Research Area
Euphresco	EUropean PHYtosanitary RESearch Coordination – ERA-Net
EWRS	European weed research Society
IALE	International Association for Landscape Ecology
ICARDA	International Center for Agronomic Research in the Dry Areas, Aleppo, Syria – member of CGIAR
ICIA	Instituto Canario de Investigaciones Agrarias, Canary Islands, Spain
ICIPE	International Centre of Insect Physiology and Ecology
ICPC	International Cooperation Partner Country – <i>see also ITC and POEu</i>
INCO	International Cooperation (specific program of FP6)
INRA	Institut National de Recherche Agronomique, France (same spelling for Tunisia, Algeria and Morocco)
INTA	Instituto Nacional de Tecnología Agropecuaria, Argentina
IOBC	International Organisation for Biological and Integrated Control of Noxious Animals and Plants
IPM	Integrated Pest Management
IPPM	Institute of Plant Protection and Microbiology – ZAAS, China
IQSA	Institute of Quality and Standard for Agro-products – ZAAS, China
ISAR	Institut des Sciences Agronomiques du Rwanda
ITC	Inco Target Countries – Non European countries eligible under former INCO programme of FP6 – <i>see also POEu and ICPC</i>
JKI	Julius Kühn Institute, Germany
JPA	Joint Programme of Activities
KUL	Katholieke Universiteit Leuven
PIP	Programme Initiative Pesticides
LARI	Lebanese Agricultural Research Institute, Lebanon
POEn	Partners Outside Endure
POEu	Partners Outside Europe – <i>see also ICPC and ITC</i>
RAx	Research Activity n°x
RRes	Rothamsted Research, U.K.
RI	Rothamsted International, non-profit subsidiary of RRes, U.K.
SZIE	University Szent István, Hungary
UCL	Université Catholique de Louvain
USDA	United States Department of Agriculture
WSSA	Weed Science Society of America
ZAAS	Zhejiang Academy of Agricultural Science, China

1. INTRODUCTION

1.1. General Background

European agriculture is not isolated, especially in the context of an increasingly globalized world. Thus, ENDURE must develop links with Partners Outside Europe (POEu). Biodiversity is of great importance in tropical and subtropical countries which are facing major development challenges. The responses they give to these challenges may impact significantly on countries in Europe through the import of products from these countries and possible invasion by alien pests. Studies, which have been completed or are ongoing in these countries, have generated considerable knowledge but have not always been published. Increasing the availability and access to this knowledge would be highly beneficial both for Europe and Partners Outside Europe. In addition, ENDURE and POEu teams will benefit from the exchange of knowledge and experience of each other's strategies for optimisation and reduction of use of plant protection products. Therefore, the integration of research teams from POEu into the long lasting ENDURE network (beyond 2010) is a major priority of the network, through the IA1-3 sub-activity (formerly SA3-2 see § 1.2).

In addition, Endure is a new coming actor of the crop protection sector, and obviously for it must develop links and interactions with existing organisations and networks dealing with crop protection as well as with other funded projects in the same area. That was the goal of the Crop Protection Network (CPN) that Endure expected to develop as a forum of members with common interest.

1.2. Organisation and evolution of activities

During the first two years of activities (2007-2008) the two sectors of external linkage were organised in two specific sub-activities:

- IA1.3: "Cross-linking with networks and projects", which was mainly devoted to build and develop the CPN, and considered as an integrative activity.
- SA3.2: "Foster the participation of research teams from INCO target countries", devoted to develop links with non European partners and considered as a spreading activity.

At the end of 2008 during the preparation of the 3rd JPA (M25-M42), two different considerations led to merging these two activities.

On one side, there was a clear difficulty in building a formal CPN as expected formerly. This appeared since September 2007 and the CPN-ExCom Meeting in Barcelona (see minutes of this meeting) which stated that *"The CPN members do not constitute a homogeneous body and ENDURE will interact individually with its members on a case-by-case basis and on specific topics of mutual interest"*.

In parallel the SA3.2 group considered its sub-activity more as one of integration by developing the concept of linking with partners outside Europe on the basis of mutual interest. In addition, sub-activity SA3.2 developed the concept of “Partners Outside Endure” as a whole, including specific academic or research organisations, networks, projects and more widely “entities” interested in crop protection worldwide.

Therefore, the two sub-activities were merged in a revisited IA1.3. “Linking with partners outside ENDURE”.

2. DEVELOPMENT OF THE TWO-TRACK SYSTEM (TTS)

The Two-Track System (TTS) has been created as a general platform for exchanges between ENDURE and researchers from outside the Network. In the Deliverable DI4.5 “Pilot scheme of a two-track system for exchanging information and expertise from/to ENDURE”, the structure and general functionalities of the TTS were presented. The system has been developed and installed on the ENDURE test server at the following address: <http://twotrack.endure-network.eu>.

The latest release of the TTS has been implemented at <http://85.31.206.193:8080/twotrack/twotrack?restart=sj> with new kinds of data which were gathered within the IA1.3 activities about 1) existing links (persons and entities) and 2) Funding sources for developing specific projects or actions with POEn (see Deliverable DS3.5 “Report on progress and success with the participation of partners from INCO target countries”). The TTS has been adapted to share the ENDURE common data with the other applications. A detailed description is available in the Deliverable DI1.11 “Final release of the implemented Two-Track-System”.

The Two-Track System will be integrated into the ENDURE Information Centre and in the Virtual Lab tools and it will be mainly dedicated to managing information about ENDURE contacts, network of experts and other information about organisations and groups related to pest management (POEn).

3. SPECIFIC TWINNING ACTIONS WITH ARGENTINA

The European Commission, DG-RTD, together with Argentinean and MERCOSUR authorities co-organised a workshop to launch a twinning initiative between selected European and Argentinean projects. This workshop took place in Buenos Aires, Argentina, May 7 & 8, 2009. It was aimed at providing an opportunity for programme managers and project leaders from Argentina/MERCOSUR and the EU projects to explore possible fields of cooperation and to design future twinning activities such as short term exchanges, visits of researchers, setting up of common working groups, organisation of workshop, sharing of data, information, knowledge and material as well as research and educational projects.

On behalf of the IA1.3 core group (Linking with partners outside ENDURE), Alex Percy-Smith from the Faculty of Agricultural Sciences, Aarhus University, Denmark represented the ENDURE Network of Excellence at this meeting.

After his return to Denmark the IA1-3 activity leader identified additional resources within the ENDURE budget so as:

- To invite partners from Argentina to the Annual meeting to be held in Wageningen, Netherlands in October and
- To organise visits of Argentinean scientists to ENDURE partners teams, and ENDURE partners to Argentina.

Five Argentinean scientists were invited to attend the Annual Meeting in Wageningen and visit ENDURE partner labs in connection with the visit:

- **Luis Wall** from Departamento de Ciencia y Tecnología, Universidad Nacional de Quilmes was invited to a project workshop in Belgium in September and met a network of top scientists with whom he started networking. In addition, he visited CIRAD, France from 27th September to 17th October prior to attending the ENDURE Annual Meeting.
- **Sofia Chulze** from La Universidad Nacional de Río Cuarto in Cordoba attended the ENDURE Annual meeting.
- Three colleagues of Daniel A Ducasse, Instituto de Fitopatología y Fisiología Vegetal (INTA), Córdoba, met at the twinning workshops in May in Buenos Aires attended the ENDURE Annual meeting. The three were:
 - o **Jorge Frana** an entomologist with a Ph.D. in biological control
 - o **Norma Formento** who is a plant pathologist and specialist in disease management
 - o **Ricardo López** who is a weed scientist involved in weed tolerance/resistance to herbicides.

The group of five visited the Faculty of Agricultural Sciences, Aarhus University, Denmark for a brief visit before continuing to the ENDURE Annual Meeting. After the meeting they visited the Wageningen University and Research Centre. Three of the guests also visited Rothamsted Research, UK – and were invited to put forward scientists for the Rothamsted International Fellowship Scheme. Several areas of interest were identified including pest modelling, pest outbreak forecasting, pesticide resistance management and weed management. There is real interest in taking this collaboration forward.

The twinning principle of travel to Europe being covered by the Argentineans, whereas transport in Europe and accommodation being covered by ENDURE was used. The host institutions also covered some of the associated costs. Clearly each partner covered the scientists' time from their own institutional budget.

An additional call will be launched at the Annual Meeting so as to encourage such mobility activities between Argentina and ENDURE.

This is a most important development towards making a Crop Protection Network that is not rigidly limited to ENDURE or the Argentinean projects and will contribute to a lasting and extended network beyond the present ENDURE project.

The progress made since the twinning workshop represents a stage of building up networks. In the future there will be a more lively exchange of information and ideas, invitations to workshops and conferences and hopefully, if the right call appears, development of a European – Argentinean proposal for an EU project. As always the success will depend on the resources available from outside as there are very few resources at the universities and research institutions available for implementing research projects.

4. ACTIONS TOWARD AND WITH POEn

4.1. General considerations and actions

In 2009, actions were focused mainly on setting up and implementing the Forum of POE (during the Annual meeting in Wageningen) and specific twinning actions with Argentina (since may 2009 – see § 3).

Identified partners were invited to the Annual Meeting in Wageningen. Invitations were based on:

- 1) The group of partners, who had already participated in previous POE workshops,
- 2) Unsuccessful applicants for the mobility calls
- 3) Argentinean participants through the contacts established during the twinning meeting in Buenos Aires.

The number of invited partners was limited by the available resources, 15 of them were selected, and 13 were able to join the meeting (see ANNEX 1). All were requested and accepted to sign the non-disclosure agreement which allows them to have access to the ENDURE work-space.

They participated in workshop “Interaction between ENDURE and Partners Outside Europe”. During this workshop, very specific and concrete points of collaboration with ENDURE were presented and discussed concerning Education (Summer School, and Ph.D. programs), Mobility (specific ICPC calls) and Research (participation in the workshops of the Annual meeting, so as to encourage direct links with ENDURE activities).

The rationale for establishing a forum of Partners Outside Europe was also presented and discussed. In the end the Forum was officially launched (see Deliverable DI1.14 for more details). This Forum will be the main tool for linking the ENDURE network with the countries outside Europe. Among the main lines of the linking actions the four major are:

- Enable the voice of countries outside Europe to be heard when designing research projects, training/education and mobility programmes
- Help identify relevant Partners Outside Europe when building up partnerships and developing projects
- Participate in relevant ENDURE activities

- Provide the basis of a longer-term collaboration between ENDURE and the European Crop Protection community and Partners Outside Europe

Minutes of the workshop are available on the IA1.3 page of the internal working space.

Specific actions were also undertaken with some crop protection entities:

- interaction with SA2.3 and identifying funds for inviting John Holland from IOBC to the workshop RA2.3 organised at the IALE 2009 in Salzburg (in the end he was not able to attend and no substitute could be found)
- Interaction with the ENDURE Coordinator Pierre Ricci who attended an Euphresco meeting so as to develop links on the topic of Invasive and emerging pests & diseases. Looking for involving Euphresco teachers in the Summer School 2010 on this topic (see § 4.5.1).
- Contact with PIP2 (Pesticide Initiative Program, phase 2, DG Dev) through Gilles Delhove (CoLEACP) who was invited in participating in the Annual meeting but could not attend due to a conflict of dates. Further links are being developed.

More generally, as mentioned in the introduction, interactions with POEn are built on a basis of mutual interest between external entities and specific ENDURE activities (e.g. IOBC with RA1.2 and RA2.3; IALE with RA2.3; EWRS, WSSA and USDA with RA4.5). In addition some major external entities (representing research, education, NGO, industry...) are represented in the External Advisory Board (new comers in 2009: EPPO and CGIAR).

From a geographical point of view, in addition to the specific process of twinning action with Argentina initiated by the Commission, specific cross-links with two countries with emerging economies (China and Brazil) and one with a region of particular interest for Europe (the Mediterranean region) were developed. They are presented below.

4.2. Specific Actions with China :

Dr Jianping Chen, President of Zhejiang Academy of Agricultural Sciences (ZAAS), Hangzhou, China participated in the first POEu meeting in Rothamsted (June 2008 – see Deliverable DS3.5). During that meeting he launched the idea of building an ENDURE-like network in China and to build strong links with the European ENDURE network. In 2009, two high-level representatives of ZAAS (Vice President Dr Zhiqi Meng and Director of IQSA, Dr Qiang Wang), attended the Annual Meeting in Wageningen (October 2009 - see § 4.1), and they brought a note “ENDURE In China – An introduction to our team in ZAAS”.

In this 70-page note they presented the organisation of ZAAS and the main concerns about pest and diseases and crop protection in China, with focus on pesticide facts. They provided details about two relevant institutes IQSA (Institute of

Quality and Standard for Agro-products) and IPPM (Institute of Plant Protection and Microbiology) among the 15 ZAAS institutes.

In addition they presented 21 key persons of ZAAS, IQSA and IPPM (see ANNEX 2).

There's a very strong commitment from ZAAS to initiate a national crop protection network in China and to develop strong links with ENDURE in Europe. We have no doubt that it will be a solid "building block" for further concrete interactions and a model for building such national or regional networks outside Europe, connected with ENDURE (see "Future Prospects"). ZAAS has plans to visit Europe again during 2010.

4.3. Specific Actions with Brazil :

Embrapa is Brazil's national organisation for Agronomic Research. With an annual turnover of £400 million and more than 30 agricultural research institutes across the country, it represents a large body of plant protection research and is influential on the global platform. Embrapa places international collaboration as a high priority and has developed a unique mechanism for achieving this through the "Labex" (External Laboratory) concept. Several LABEX platforms are now in place across Europe¹ (Montpellier, Avignon and Dijon in France with CIRAD and INRA, Rothamsted in UK with RRes and Wageningen in the Netherlands with WUR). Therefore, links already exist with some major ENDURE partners.

Embrapa has expressed considerable interest in working more closely with ENDURE, but at presently no specific mechanisms have been developed with ENDURE to achieve this. Embrapa has been represented at all ENDURE POEu meetings (Rothamsted 2008 Dr Miguel Borges, La Grande Motte 2008 Dr Luis Vieira and Wageningen 2009 Dr Pedro Arcuri) and is formally member of the Forum of POEu. A Technical Cooperation Project between Embrapa and Rothamsted focusing on novel pest management is under negotiation, Based on this as well as collaborations with CIRAD and Wageningen, work is ongoing to strengthen the Embrapa link with ENDURE.

4.4. Specific Actions with the Mediterranean Area:

In September 2009, CIRAD (Jean Louis Sarah) and INRA (Philippe Lucas) met several Mediterranean Partners (see ANNEX 3) at ICARDA (member of CGIAR) in Aleppo, Syria during an IPM workshop aimed at developing links and regional projects.

During that workshop the ENDURE Network was presented and a concept note was written about the building of a circum-Mediterranean IPM Network.

¹ Labex is also present in the USA, in Asia, in Africa and Latin America

As a result Dr Saadia Lhaloui, from CRRRA Settlat in Morocco was invited to the Annual Meeting in Wageningen along with Dr Fouad Abbad Andaloussi, who had already participated in the meeting in La Grande-Motte. Jean Louis Sarah met Saadia Lhaloui again during the AMPP meeting in Marrakech in November 2009, so as to strengthen the links and discuss the future prospects. INRA Morocco, which already has some collaborative projects with INRA and CIRAD in France, should be a key partner to develop a regional IPM network around the Mediterranean.

4.5. Actions linked with other ENDURE's activities

4.5.1. Training and Education (Summer School – SA1.2)

The 2nd ENDURE summer school for Ph.D. students took place from 14th to 20th June 2009 in Volterra, Italy. The theme was: "Modelling approaches to support IPM". Five students from POEU countries (Argentina, Burundi, Madagascar, Iran and India) were selected among the seventeen students. Like in the 1st summer school, there was at least one student from each of the five continents. Students followed lectures, participated in guided team work and presented the results of their work in a final plenary session.

The 3rd summer school will take place from 3rd to 8th October 2010 and planning is well under way. The IA1.3 working group proposed the thematic of "New and emerging pests, diseases and weeds" during its core meeting in Denmark in March 2009. This topic was selected because it is of interest for POEU and would be a good opportunity to develop this theme within ENDURE. A list of ENDURE partners potentially providing lecturers has been developed. Initial planning for involvement of ICPC experts and students is being developed with IA1.3. The summer school call will be released at the end of April 2010. The team of lecturers will be finalised by early May 2010. In addition, a contact person (Silke Steimoeller) from the EUPHRESKO network has been identified for potential involvement of their experts in the 3rd summer school.

4.5.2. Research (RA1)

Two POEU were specifically involved into Endure activities:

- CARBAP, regional research center based in Cameroon, involved in the banana case study with Dr Kodjo Tomekpe (Endure contact Jean Michel Risède – CIRAD). This case study implies as well a POEN, ICIA from Canarias
- University of Talca (Chile), involved in the Vineyard case study with Dr Hector Valdès (Endure contact – Christian Gary INRA)

4.5.3. Staff Mobility (IA3)

Specific three-month grants have been developed for POEU on the same basis as the grants for internal mobility. The second and third mobility calls have been launched. They were submitted by a range of applicants and in general the

applications were of a high standard making it difficult to select the persons (see - http://www.endure-network.eu/content/view/full/1390/offset/1/nom/mobility_and_job_opportunities/staff_mobility/external_mobility)

IA1.3 participated in the formulation of the 2nd and 3rd calls and in the selection of the applicants.

The 2nd call was launched in April 2009 with a deadline July 2009. Eleven applications were received and the following three were selected:

1)

Sending institute: Ladoke Akintola Univ. of Techn., Ogbomoso – **Nigeria**

Name: Timothy I. **OLABIYI**

Topic: Integrated control of soil-borne pathogens of onion using composts and *Trichoderma* species

Hosting Institute: CNR-IPP, Italy

Status: ENDED, Final report written and sent

2)

Sending institute: Ministry of Scientific Research - **Cameroon**

Name: Appolinaire **TAGNE**

Topic: Screening of essential oil from *Thymus vulgaris* for its fungicidal properties against *Bipolaris sorokiniana* the pathogen of black point disease of wheat

Hosting Institute: JKI, Germany

Status: ENDED, Final report written and sent

3)

Sending institute: Bila Tserkva National Agrarian University - **Ukraine**

Name: Tetyana **DYMAN**

Topic: Adaptation of LCA tool to farming practice for assessment of pesticide impact on biodiversity in the Ukraine

Hosting Institute: AGROS, Switzerland

Status: On-going

The 3rd call was launched on 30th September 2009 with the deadline being 15th November 2009. Fourteen applications were received and the following three were selected:

1)

Sending institute: Universidad Nacional de Rio Cuarto, Cordoba- **Argentina**

Name: María Marta **REYNOSO**

Topic: Interaction on *Fusarium*'s detection, screening, inoculation and risk assessment.

Hosting Institute: AU, Denmark

Status: CANCELLED due to candidate's becoming pregnant and substituted by::

Sending institute: National Agricultural research Organization-**Uganda**

Name: Stella **KABIRI**

Topic: The role of seed on the invasiveness of *Cymbopogon Afronardus*

Hosting Institute: AU, Denmark

Status: to be started

2)

Sending institute: The University of The West Indies- **Trinidad**

Name: **Wendy – Ann Patrice ISAAC-GEORGE**

Topic: To participate in the follow up of the Field Vegetable Case Study (FVCS) experiment and in similar trials carried out at CIRAA

Hosting Institute: SSSUP, Italy

Status: to be started around mid-May 2010

3)

Sending institute: Russian Academy of Agricultural Sciences, Saint-Petersburg-Russia

Name: **Alexander BERESTETSKIY**

Topic: Molecular taxonomy of fungal species, potential mycoherbicides for biocontrol of noxious perennial weeds, and their metabolic profiles

Hosting Institute: CNR, ISPA, Italy

Status: On-going

5. COMMUNICATION

a) The IA1.3 sub-activity group have been liaising actively with SA3.1 (through web editor Andrew Lewer) to communicate relevant information to POE. This has been achieved through the development of a dedicated POE web-page (http://www.endure-network.eu/information_for/partners_outside_europe) on the new ENDURE website (launched May, 2009). This page contains direct links to information particularly relevant to POE, such as the Two-Track System, funding sources for international collaboration, mobility, job opportunities and ENDURE contacts etc.

b) Liaison with activity leaders with comments being invited on the links provided for Partners Outside Europe.

c) Openness to responding to specific enquires. All enquiries addressed to ENDURE through the 'Contact' page of the website are received directly by ENDURE coordination at Sophia Antipolis, France, and distributed to the appropriate activity leader. In the case of IA1.3, these enquiries have been answered on a case by case basis.

d) Communicating information on i) funding opportunities (http://www.endure-network.eu/about_endure/funding_sources_for_international_collaboration). ii) Specific activities linked with POE are announced when relevant. The dissemination of information on the mobility and summer school calls, for example is distributed by each group member to their personal and their organisation's contacts by email.

e) Supporting literature has been produced to raise awareness of ENDURE within POE, in the form of a poster for the Annual Meeting in Wageningen and a specific POE leaflet (a template for the design and style of this was provided for use by the ENDURE Information Centre).

ANNEX 4 presents a list of indicators including the e-links established through the Endure web-site.

6. FUTURE PROSPECTS

For any external entities (POEn – which includes POEu) a common goal will be to engage them with the EU regarding areas most deserving emphasis in future funding rounds. The activities planned in 2010 will also set the scene for POEn-related activities foreseen in the ENDURE ERG and thus will contribute significantly to the sustainability of the ENDURE Network beyond 2010.

There will be a focus towards a permanent tool for active participation of POE and building the Forum to be lasting beyond 2010. This includes research, education, training, mobility, knowledge and know-how sharing and exchange. There will be close connection with RAx (Research), SA1 (E & T – especially summer school), IA3 (Mobility) and SA3 (external communication).

This will also prepare the future by specific actions to develop national or regional IPM networks (China – on going - , Mediterranean – first contacts – Latin America , starting with Twinning project with Argentina and contacts with Embrapa in Brazil – see § 3)

POEu's Forum members will be invited to the closing ENDURE conference for an active participation and expected worthy inputs.

ANNEX 1

POEu participants in the Annual meeting and core group of the Forum of POEu

Name	Organism	Country	Address	Email
Norma FORMENTO	INTA	Argentina	INTA, Estacion Experimental Agropecuaria Parana, Ruta 11 km 12.5, (3101) Oro Verde, Parana, Entre Rios, Argentina	nformento@parana.inta.gov.ar
Jorge FRANA	INTA	Argentina	INTA, Estacion Experimental Agropecuaria Rafaela, Ruta 34 km 227, C.C. 22, S2300ICD Rafaela, Santa Fe, Argentina	jfrana@rafaela.inta.gov.ar
Ricardo LOPEZ	INTA	Argentina	INTA, Estacion Experimental Agropecuaria Parana, Ruta Pcial., Nro 76 km 36.5, (8187) Bordenave, Buenos Aires, Argentina	rllopez@bordenave.inta.gov.ar
Sofia CHULZE	UN Rio Cuarto	Argentina	Universidad Nacional de Rio Cuarto, Department of Microbiology and Immunology, Facultad de Ciencias Exactas Fisico-Quimicas y Naturales, Rutas 8 y 36 km 601, (5800) Rio Cuarto, Argentina	schulze@exa.unrc.edu.ar
Luis WALL	UN Quilmes	Argentina	Universidad Nacional de Quilmes, Departamento de Ciencia y Tecnologia, R. Saenz Pena 352, B1876BXD Bernal, Argentina	lgwall@unq.edu.ar
Anne WATHONI NJOROGE	ISAR	Rwanda	Institut des Sciences Agronomiques du Rwanda (ISAR), BP 5016, Kigali, Rwanda	annienjoroge@gmail.com
Renata BAZOK	Faculty of Agriculture	Croatia	Faculty of Agriculture, Department for Agricultural Zoology, Svetosimunska 25, Zagreb 10000, Croatia	rbazok@agr.hr
Zhiqi MENG	ZAAS	China	Zhejiang Academy of Agricultural Sciences 198 Shiqiao Road Hangzhou, Zhejiang, 310021 PR China	mengzq2011@sina.com
Qiang WANG	ZAAS	China	Zhejiang Academy of Agricultural Sciences 198 Shiqiao Road Hangzhou, Zhejiang, 310021 PR China	qiangwang2003@sina.com
Saadia LHALOUI	INRA	Morocco	INRA-CRRA Settati, PO Box 589, Settati, Maroc	slhaloui@yahoo.com
Fouad ABBAD ANDALOUSSI	INRA	Morocco	INRA, Division Scientifique, BP 415, RP, Rabat, Maroc	abbadandaloussi@yahoo.fr
Nazaire NKOUKA	AFIPP	Congo	CIRAD-Bios, UR Maîtrise des Bio agresseurs des Cultures Pérennes, TA A-31/02, 34398 Montpellier Cedex 5, France	nazaire.nkouka@cirad.fr
Pedro Arcuri	Embrapa-Labex	Brazil	Embrapa-labex, Agropolis International, Avenue Agropolis, 34394 Montpellier CEDEX 5, France	arcuri@agropolis.fr
Kodjo TOMEKPE ⁽¹⁾	CARBAP	Togo	CARBAP, BP 832 Douala, Cameroun	kodjo.tomekpe@carbap.africa.org
Omar DIOUF ⁽¹⁾	CARBAP	Senegal	CARBAP, BP 832 Douala, Cameroun	omar.diouf@carbap.africa.org

(1) These two persons were invited and hotel pre-paid but they could not attend in the last minute

ANNEX 2

List of main contact persons in ZAAS (China)

Name	Organism	Position	Telephone	Mail	Status / Topic
Fuyun Zhu	ZAAS	Dep. Director - Foreign Office	86 571 8640 1036	zhufuyun@sina.com	
Xiaowen Chen	ZAAS	Foreign Office	86 571 8640 4008		main contact person
Jianping Chen	ZAAS	President	86 571 8640 4003	jpchen2001@yahoo.com.cn	Viruses of cereals
Zhiqi Meng	ZAAS	Vice-President	86 571 8640 4031	mengzq@sina.com	genome et génétique ver à soie
Qiang Wang	IQSA-ZAAS	Director	86 571 8640 4355	qiangwang2003@sina.com	IPM, pesticide side effects, food safety
Lizhen	IQSA-ZAAS				Pesticide residues, IPM
Zhao Xue Ping	IQSA-ZAAS				Pesticide application, resistance and risk assesment
Zhang Zhiheng	IQSA-ZAAS		86 571 8641 5206	zhihengest@126.com	food safety, environment impact assesment, Policy & regulation
Liqin Wu	IQSA-ZAAS				Pesticide residues, Safety of veterinary drugs
Zhaohua	IQSA-ZAAS		86 571 8640 4056	zh19602006@yahoo.com.cn	Environmental fate of pesticides
Yuan Yu-Wei	IQSA-ZAAS		86 571 8641 9068	ywytea@163.com	risk assesment of pesticide residues in food
Yanhua Wang	IQSA-ZAAS				IPM, pesticides impact on natural ennemies, insecticide resistance management
Li Gang	IQSA-ZAAS		86 571 8641 9002	lxjiren@gmail.com	Weed resistance to herbicides
Cai Xiao Ming	IQSA-ZAAS				semiochemichals in tritrophic interactions
Wang Xin-Quan	IQSA-ZAAS				residue analysis, pesticide fate in plant and soil, risk assesment
Yaobin Lu	IPPM-ZAAS	Director	86 571 8640 0445	luybcn@163.com	IPM, tritrophic interactions, biology of invasive pests
Zhongxian Lu	IPPM-ZAAS	Deputy director for research	86 571 8640 4077	luzxmh2004@yahoo.com.cn	Pest management trough ecological engineering and biodiversity for enhancing ecological services
Jian-Ming Chen	IPPM-ZAAS	Head Plant prot. engineering	86 571 8640 0486	chenjm63@yahoo.com.cn	plant tolerance, insect symbiotes for control, spreading of invasive species
Liezhong Chen	IPPM-ZAAS		86 571 8640 4063	zwsclz@163.com	Botanical pesticides, "green" adjuvants, pesticide formulation
Yanli Wang	IPPM-ZAAS	Head of plant pathology	86 571 8640 4228	wangylaa@yahoo.com.cn	rice resistance source (fungi), plant-pathogen interactions,
Hanrong Wang	IPPM-ZAAS	Head Horticulture diseases	86 571 8640 4224	wanghrq@yahoo.com.cn	etiology and management of diseases, soil-transmitted diseases, melon D. bryoniae

ANNEX 3

IPM Workshop Participants Aleppo, Syria, (1st-2nd September 2009)

Mohammad AlKhalaf

GCSAR-Aleppo Center Almidan. Aleppo, Syria
E-mail: malkhalaf72@yahoo.com
Tel : 00 963 21 4647200 Fax : 00 963 21 4644600

Atie Arab

GCSAR-Aleppo Center Almidan. Aleppo, Syria
E-mail: atiearab@hotmail.com
Tel : 00 963 21 4647200 Fax : 00 963 21 4644600

Ali Sbeih

Bouka Agriculture Research Center. Lattakia, Syria
E-mail: Ali_sbeeh@hotmail.com
Tel : 00 963 41 434872 Fax : 00 963 41 419653

Noura Omri Benyoussef

Rue Hedi Karray 2049 Ariana, Tunisia
E-mail: noura.moi@gmail.com
Tel : 00 216 71 280024

Elia Choueiri

Lebanese Agricultural Research Institute, Tel Amara, Rayak
P.O. Box 287, Zahlé, Lebanon
E-mail: echoueiri@lari.gov.lb
Tel : 00 961 3 833142 Fax : 00 961 8 90077

Saadia Lhaloui

INRA-CRRA-Settat., Settat, Morocco
P.O. Box 589
E-mail: slhaloui@yahoo.com
Tel : 212 664 05 84 98 Fax : 212 523 72 93 06

Salah Oukil

INRA, Algeria
Avenue Hacène Badi Elhavyach, Alger, Alegria
E-mail: S_oukil@hotmail.com
Tel : 0772.13.5959 Fax :

Mohammad Abdulhai

GCSAR-Aleppo Center Almidan. Aleppo, Syria
E-mail: mohamad_abdulhai@yahoo.com
Tel : 00 963 21 4647200 Fax : 00 963 21 4644600

Jean Louis Sarah

CIRAD, France
E-mail: jean-louis.sarah@cirad.fr
Tel : 00 33 467 61 58 70

Philippe Lucas

INRA, France
UMR BiO3P BP 35327 F 35653 LE RHEU, France
E-mail: philippe.lucas@rennes-inra.fr
Tel : 00 33 223 485 196 Fax : 00 33 223 485 180

Bernard Rolland

INRA, France
UMR Amélioration des plants et Biotechnologies
Végétales BP 35653 LE RHEU, France
E-mail: bernard.rolland@rennes.inra.fr
Tel : 00 33 23 48 51 35 Fax : 00 33 23 48 51 20

Jean Philippe Deguine

CIRAD, France
7, Chemin de l'IRAT
97410 St pierre (La Réunion)
E-mail: jean-philippe.deguine@cirad.fr
Tel : (262) 262 49 92 31 Fax : (262) 262 49 92 08

Michel Ribard

INRA, France
2 Place Pierre Viala 34060 Montpellier Cedex 2, France
E-mail: ribard @supagro.inra.fr
Tel : 00 33 (0) 4 99 61 31 01 Fax : 00 33 (0) 4 67 54 32 01

ANNEX 4

Indicators of Links with POEn

Indicators (number of: documents, records, database, visitors, tools, publications, etc.)	Evaluation at M36 (December 2009)
Number of actual cooperation with ICPC	2 partners (RA1.2 banana and grapevine)
Number of ICPC links (countries – excluding web links/visits)	24
Number of CPN links (entities – excluding web links/visits)	29 (including 7 from Argentina)
Number of ICPC/CPN links (persons – excluding web links/visits)	87
POE Participants in the 2009 Summer School	5+1 substitute (out of 16)
POE mobility applicants/granted (Argentina)	23/7 (3/2)
Participants in Annual meeting, total/Argentinean	13/5
Web visits Europe(nonEC)/rest of the world/total	1300/6300/7600
Web links with other IPM related sites (organisms, projects, networks, stakeholders)	129
POE/CPN subscribers to the electronic newsletter	127