4th Annual Newsletter

May 2015

Introduction: *words from the coordinator*

Dear readers,

This is the last annual newsletter of the PURE project. The PURE Congress in January 2015 in Poznan, "IPM Innovation in Europe", was a successful and important event of the project's last period. It was a very valuable occasion to share the results of PURE and of other IPM projects with various stakeholders.

In this newsletter, you will find information on this congress, and also on the new productions of the project.

At the end of PURE project (i.e. February 2015), I would like to thank very much all the people who developed its dynamic, the PURE consortium and work package leaders, our Stakeholder Advisory Board and the EC. I sincerely hope that the reading of this newsletter has been helpful, and that it contributes to a useful dissemination of the PURE results. It is not the end of a story: PURE is a step, but ENDURE will valorize its outputs and continues carrying out activities on IPM.

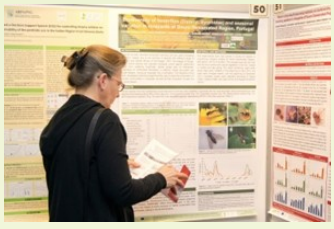
Françoise Lescourret (INRA), Coordinator of PURE project

IPM INNOVATION IN EUROPE

The second (i.e. final) PURE Congress specifically targeting stakeholders was organized in Poland (Poznań) on 14–16 January 2015. The organisation of the congress was under the responsibility of IOR – NRI, helped by the PURE community.

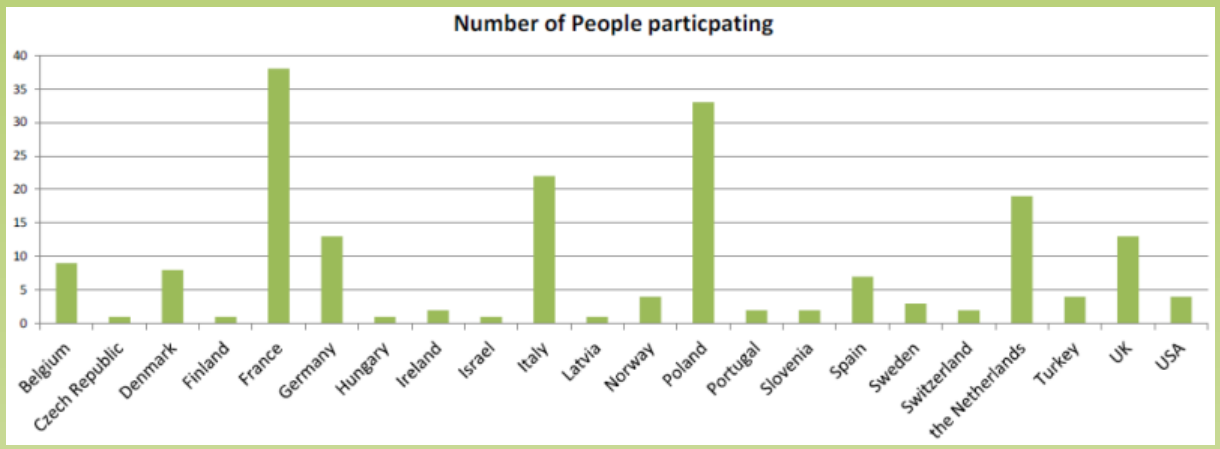
During three days the congress provided a forum for:

- the dissemination and discussion of PURE project's results;
- the presentation and discussion of results from other integrated pest management projects, so that PURE activities can be presented and reviewed in the context of other R&D programmes;
- the organization of workshops on the topics addressed by PURE working groups;
- the monitoring and evaluation of the project's progress by stakeholders and external people.



81 posters were presented, and about 86 oral presentations were done. They are available in the complete book of abstracts.

The congress attracted more than 194 participants from academia and stakeholders from Europe and all over the world (23 countries).



Moreover, some presentations and extracts from this book are also available on the website:

- Assessment and design of IPM tools with J.N.Aubertot presentation
- Annual crops
- Perennial crops
- Protected crops
- Pest evolution
- Biological control
- Ecological engineering
- Co-innovation
- Perspectives and challenges

The specific session on Perspective and Challenges was the occasion to present plenary presentations, among which:

F.Lescourret: The contribution of Pure

J.E. Jensen: The advisory perspective

S. Dachbrodt-Saaydeh : How EU member states promote IPM implementation

P. Jepson: IPM – scaling up and trusting farmers

To conclude the congress, two presentations were done by existing network leaders:

A.Messéan: Towards more coordinated research in Europe – the C-IPM Era-net

B.Giovanni: Euphresco – An opportunity for phytosanitary research coordination and funding in the EPPO region and abroad

PURE PROJECT ACTIVITIES

During the project, a lot of work was done. Now, all the results are available on the website. You can find 29 new deliverables in the "Publications – Deliverables" section. Some of these deliverables will be accompanied by e-learning materials available in the "Publications – e-learning" section.

CROPPING SYSTEMS

For these activities, the main results are the last assessments of IPM solutions and each cropping systems team produced IPM guidelines summarizing the "Results and lessons learnt in Pure".

These "guidelines" will be easily accessible in the form of booklets in the "Publications – Booklet" section.

INNOVATIVE RESEARCH ACTIVITIES

Wheat

Ex-post assessments of the IPM solutions tested the 3rd year on-station and on-farm;

IPM guidelines for winter wheat based rotations in Europe;

Maize

IPM guidelines for European maize cropping systems based on the overall evaluation of the set of innovative IPM solutions in terms of pesticide use reduction and sustainability;

Field vegetables

Ex-post assessment of the tested IPM solutions using DEXiPM;

IPM guidelines for cabbage based farming systems in Europe;

Pomefruit

IPM guidelines for pomefruit systems in Europe;

Grapevine

Ex-post assessment of IPM solutions tested in experimental stations and farms and updates of database of alternatives to pesticides and IPM solutions;

IPM guidelines for grapevine in Europe;

Protected crops

Ex-post assessment of the selected scenarios after testing in real farming conditions;

Prospective study on the robustness of the integrated production and protection solutions with regard to global climate change;

IPM guidelines for protected vegetables in Europe;

For each of these activities, a number of deliverables are now available:

IPM Assessment and Methodology

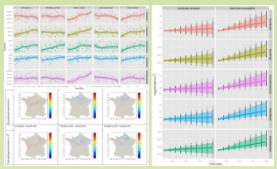
A report on various optimization methods for the design of IPM solutions

A report on the modelling of multiple pests

Cost-benefit analysis of IPM solutions

A GIS based model approach to assess environmental risk and risk to human health risk on regional level

Final versions of DEXiPM assessment tool



Pest evolution and enhancement of the durability of IPM solutions

Empirically parameterized and verified rotation scale models for gene frequencies in weed populations under IPM in the context of crop rotation, and blueprints for strategies that replace reliance on herbicides by integrated options;

Report on the expected efficacy of spatial deployment strategies and integrated disease management for combating epidemics and resistance development in main plant pathogens in Europe, focus on cereal rusts and septoria;

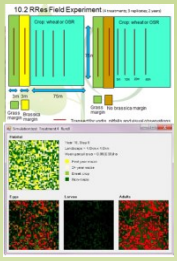
Report on the co-evolution of resistant and susceptible weed biotypes in herbicide free maize and wheat fields;

Formulation and assessment of improved BCAs (diversified granulosis virus preparations to overcome the problem of virus resistant codling moth) and report of conditions of deployment ensuring durable efficiency;

Plant-pest-enemies interactions

Biopesticide treatments with novel mode of action and optimized for an improved activity toward their biological targets (fungi, insects, weeds, mycotoxin biosynthesis) after test in Pillar 1;

Recommendations of BCAs treatments after evaluation in field experiments;



Ecological engineering

Recommendation of manipulation of field margins to achieve pest suppression through conservation Biocontrol

Landscape effects on pest populations and assemblages including recommendations for the design of pest suppressive landscapes for wheat and orchard based farming systems

Emerging technologies

Quantified relationship between reflectance, numbers of spores in air and disease severity

Integration of NGS and BioTrove platform data for multipathogen monitoring

Evaluation of the realized performance and proof of concept of the 5 technologies developed

Co-innovation

Comparison of co-innovation approach per pilot across pilots by demonstrating efficiencies and trade-offs

Guidelines for an efficient implementation of co-innovation approaches for IPM solutions development and implementation based on lessons learned and practical results

In the end, some results will be available via e-learning materials. You will be able to find them on the "Publications – E-learning" section.

During 2015, you should find regularly news from the PURE communications team on our website informing you about the main results of the project (www.pure-ipm.eu/)