STRATEGIC RESEARCH AGENDA (SRA) FOR IPM IN EUROPE

EXECUTIVE SUMMARY



Major IPM challenges in Europe (both research and organisational)

IPM is a holistic approach and accordingly requires broad approaches in research programming in order to fulfil the multidisciplinary aspect and integration between research, advisors and end users within the given production and political frameworks.

- Monodisciplinary research focus and lack of interdisciplinary IPM research;
- Scarcity of system experiments to feed holistic research approaches;
- Dominant short-term and project-based funding;
- Decreasing trend in budget allocation to IPM research;
- Limited transfer of research knowledge into practice;
- Lack of design on the bottom-up organisation of applied research through fundamental research;
- Insufficient collaboration and communication between funders of IPM research both at country level and between the Member States;
- Increasing scarcity of human expertise.



Scope

The Strategic Research agenda (SRA) addresses the key concerns of the European Research Area Network of Coordinated Integrated Pest Management (ERA-Net C-IPM). The ERA-Net C-IPM consists of 34 partners from 21 countries.

The SRA provides recommendations on future European and national IPM research challenges, including those related to Minor Uses, and on how to enhance IPM implementation for sustainable crop production.

The starting point of the SRA is based on the results of the previous initiatives (2011-2014) of the Standing Committee of Agricultural Research Collaborative Working Group on IPM (SCAR CWG). These results were further elaborated and complemented with the outcomes of mapping national research needs and priorities as well as workshops on national research programs and infrastructures performed within the C-IPM. Stakeholder input was provided by the public consultation held in the beginning of 2015.

Aim of the agenda

- The C-IPM SRA is for agenda setting of IPM research and implementation in Europe;
- The C-IPM SRA identifies gaps in IPM research in Europe, delineates both short to medium as well as long term priorities for IPM research and enables enhanced IPM implementation in Europe;
- The C-IPM SRA shall support the alignment of national research programs on IPM within Europe.

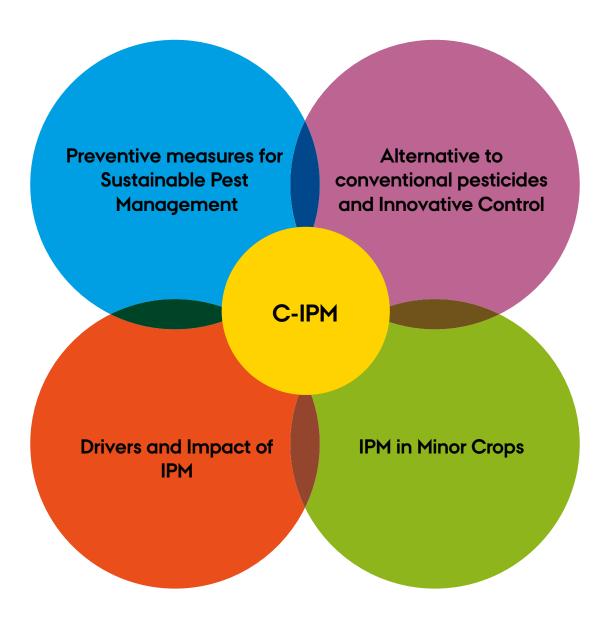
Audience

 The C-IPM SRA document is intended for researchers, policy makers and all stakeholders involved in the sector of plant protection.

SRA core themes

The most important topics, identified by the C-IPM partners, have been categorised in four core themes. Each core theme includes a number of topics that reflect the current priorities and future research needs of the partners and consequently represent short to mid-term IPM priorities.

Four core themes of the SRA



What is IPM?

IPM means careful consideration of all available plant protection methods and subsequent integration of appropriate measures that discourage the development of populations of harmful organisms and keep the use of plant protection products and other forms of intervention to levels that are economically and ecologically justified and

reduce or minimise risks to human health and the environment. IPM emphasises the growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms. As defined in the European Union Framework Directive on the Sustainable Use of Pesticides (Directive 2009/128/EC).

Key strategies to overcome major challenges

Focus on multidisciplinary research:

 Foster research based on a multidisciplinary approach to understand the drivers of IPM adoption. Since IPM covers a large set of principles and is, by far, not solely limited to reducing pesticide use.

Changes in paradigm:

- Combine research on individual crop-pest relationships and integrate them into system guidelines instead of a narrow focus on specific crop-pest relationships. IPM implementation will benefit from a broad system approach in research;
- Promote research on "lock-in" and transition phase to examine to what extent agricultural actors are locked in by "past socio-technical choices" and identify possible mechanisms of transition to IPM that consider multi-actor perspectives;
- Support long-term research projects based on cropping system approaches and ensure funding to maintain/strengthen infrastructure for long-term IPM research.

Strengthen infrastructure and knowledge exchange:

- Establish the necessary scientific infrastructure and scientific advisory capabilities to support modernisation of the monitoring and decision support systems for pests;
- Encourage knowledge sharing and adaptation of IPM approaches to minor crops/ uses by involving stakeholders;

- Integrate active and participatory dissemination into IPM research projects to ensure proper knowledge exchange and promote IPM implementation;
- Increase communication on the environmental benefits of IPM and formulate transparent and meaningful messages to the general public by focusing on IPM benefits.

Develop alternatives to pesticides:

- Better integrate biological control into IPM systems and identify the bottlenecks concerning the application of biological control in arable crops and other field crops where no or only limited alternatives to pesticides are available for protection;
- Build strategies to promote durable resistance management and monitor the occurrence of resistance development in order to slow down or prevent the resistance development and to guide decision-making in terms of sustainable pest resistance management strategies.

