





## Towards a Chemical Pesticide-free Agriculture

Towards pesticide-free agriculture to meet the objectives of the European Green Deal

#### EMERGENCE OF EUROPEAN RESEARCH ALLIANCE PESTICIDE FREE

In recognising the fact that existing targets for the reduction in pesticide use would not help tackle the environmental and health issues involved, INRAE, JKI and ZALF decided in 2018 to head up a new research approach to the issue, by proposing a **complete paradigm shift** thanks to a ground-breaking and ambitious vision **for pesticide-free farming**.

If it is to help make this objective a reality without endangering food security, the research community must completely rethink agricultural systems and go beyond the existing paradigm of a food system heavily dependent on chemical pesticides. To make this happen, it must base research **on preventive crop protection and agroecological practices designed to prevent diseases and parasites from appearing**. Research questions need to change as does the way in which research is conducted (the implementation of a systematic, multi-actor approach and the demonstration of practical solutions through the activation of an extensive network of experimental farms).

> At a national level, this commitment has led to the launch of the priority research programme (PPR) **Cultiver et Protéger Autrement ("Growing and Protecting Crops Differently")**. Piloted by INRAE, it pursues the same goal: to break with existing paradigms and bring about the emergence of pesticide-free farming.

At a European level, INRAE has been instrumental in the **launch of the** *Towards a Chemical Pesticide-Free Agriculture* initiative, which is founded on a Franco-German partnership involving the Leibniz Centre for Agricultural Landscape Research (ZALF) and the Julius Kühn Institute (JKI) - Federal Research Centre for Cultivated Plants Germany.

#### **DEVELOPMENT AND ACTIVITIES OF THE ALLIANCE SINCE 2018**

A series of seminars that have allowed a consensus to be reached in the European scientific community: namely that research should embrace multi-disciplinary approaches involving all the actors in the value chain to respond to societal and environmental challenges (sustainable agriculture, health, climate change, food security) and offer solutions enabling efficient pesticide-free farming.

On 23 February 2020, this consensus led to the **signing of a memorandum of understanding** by 24 research bodies from 16 European countries. Signed at the International Agricultural Show, the declaration led to the **official creation of a European Alliance Towards a Chemical Pesticide-Free Agriculture**, which is founded on a shared vision of farming without chemical pesticides. The Alliance has grown since then and now has **34 members from 20 European countries**.

Due to the pandemic, the events that should have taken place in 2020 to present the Alliance (seminars in Switzerland and Germany, meeting with MEPs, etc) had to be cancelled.

# A commitment that echoes the European Green Deal announced by the European Commission in December 2019 to help bring about a continent-wide environmentally sustainable transition by promoting very ambitious measures. ERA Pesticide Free is committed to proposing a **non-prescriptive research approach based on the principles of agroecology and which, in setting a long-term objective for pesticide-free farming, will see the fulfilment of the Farm to Fork Strategy target of a 50% reduction in pesticide use by 2030.**

#### SEMINARS

Paris (October 2018) Berlin (May 2019) Helsinki (October 2019)

Nearly 150 participants 40 institutes from 13 European countries

#### SCIENTIFIC COLLABORATIONS

Since its creation in February 2020, the Alliance has been very active in terms of scientific collaboration, allowing partners to work together and put forward proposals in response to calls for projects:

Submission for the DG AGRI call for proposals in 2020 (TOPAGRICS project), which saw the alliance's extensive scientific and technical expertise swing into action across Europe in collaboration with the European Commission's services. The objective: to develop an EU-wide toolbox for integrated pest management methods based on a profound change in production systems, a change based on agroecological transition;

> A TOP-AGRI-Network COST Action that sought to provide the Alliance with a formal framework and enhanced visibility, all with a view to consolidating the network and developing its research activities on the basis of concepts that seek to phase out our dependence on plant protection products.

As part of the French presidency of the Council of the European Union, ERA Pesticide Free, in collaboration with the PPR Cultiver et Protéger Autrement, is organising a European science symposium in Dijon on 2-3 June. The event will bring together agriculture researchers and professionals from across Europe to share and discuss solutions towards the phasing out of chemical pesticides.

#### FUTURE STRATEGY FOR EUROPEAN RESEARCH ALLIANCE PESTICIDE FREE

Aside from a genuine political will, **there is a real desire in the research community to devote its efforts to the zero pesticides approach**. The Alliance must continue with its activities, therefore, and increase participation in the drive to reduce pesticide use as part of the Horizon Europe research programme (2021-2027). With this in mind, it is engaging in the following actions:

- Bringing new members into the Alliance (most notably Spanish research bodies);
- > Organising regular meetings for all Alliance members in conjunction with participation in European projects;
- > Organising a joint participation strategy for the many relevant calls for proposals in Horizon Europe.

## The European Research Alliance at a glance

**34** European research institutes from **20** European countries

Over **1500** European research projects

More than **100 000** scientific papers on «Agriculture» and «Plant sciences»

A community gathering over **2000** researchers and engineers working on topics related to pesticide reduction

A network of more than **300** experimental fields/farms, spread over **8000 ha**, and access to **thousands of farms** through networks such as *Dephy* (FR), *PestiRed* (CH), *DIPS* (DE)...





UNIVERSITY

in Lublin

of LIFE SCIENCES







Comparitiespoologi Kaleteneet Beserch Indhae of Oppric Agriculum (Enschungsinstur Debidogischen Landou CUTTING ADOL INSTANCH, ORGANIC, INNOVATION, MARSLINARUA PUTURE



AGRICULTURAL UNIVERSITY OF ATHENS



Leibniz Centre for

(ZALF)

Agricultural Landscape Research











Swiss Confederation

Federal Department of Economic Affairs Education and Research EAER Agroscope

## 🥑 cirad





Latvia University of Life Sciences and Technologies







































https://www.era-pesticidefree.eu/ https://www.inrae.fr/en









Towards a chemical pesticide free agriculture