

## Factsheet

### A European roadmap for reducing contentious plant protection products (copper, mineral oil)

The RELACS project aimed at developing alternative products and tools to reduce the use of contentious inputs in plant protection in organic farming, namely copper and mineral oils. Four far-advanced products resulting from previous research projects have been tested as alternatives to copper. For mineral oil alternatives, RELACS has investigated two products and a vibration disruption mating technique.

The alternatives tested by RELACS show good potential for the reduction of copper and mineral oil. However, despite promising research outcomes, the uptake of alternatives by farmers is not straightforward. Therefore, RELACS has worked on:

- Assessing the acceptability of the alternatives by farmers;
- Identifying with stakeholders of the organic sector and EU policymakers the measures that would facilitate the implementation of alternatives in practice.

This multi-actor approach and fact-based dialogue allowed the development of a “European roadmap to reduce contentious plant protection products in organic farming systems”, with the aim to propose fair, reliable and implementable rules and agree on realistic reduction pathways for copper and mineral oil.

#### Reduction pathway for copper and mineral oils

According to the current state of knowledge, a complete phase-out of copper and mineral oils cannot be envisaged in organic farming. However, reducing their use may be possible in a near future, depending on some adaptation of the EU policy framework as well as the registration process for active substances.

It is important to note that reducing the use of contentious inputs in organic farming is not about replacing one input with another, but about improving the resilience of the whole production system. Plant protection in organic farming is based on a systemic approach, relying mainly on the enhancement of biodiversity and preventive measures. Natural substances can be used when these measures are not sufficient to protect crops. Therefore, successful reduction pathways for copper and mineral oils in organic farming are composed of several components to ensure the long-term resilience of the production system.

#### Components of copper reduction pathway

- The cultivation of resistant varieties
- The implementation of preventive measures (enhancing functional biodiversity, crop management practices)
- The use of alternative substances in combination with copper
- Lower application rates of copper, notably thanks to Decision Support Systems and a smoothing mechanism, which encourages farmers to only use copper when really needed and which is explicitly integrated into the regulations for the authorisation of copper.

#### Components of mineral oil reduction pathway

- Implementation of measures to enhance biodiversity
- Use of alternative products to mineral oils based on plant extracts (*Clitoria ternatea* and orange essential oil)
- Use of vibrational signals, as a stand-alone method or in combination with plant-derived alternatives.



## RELACS policy recommendations for enabling the reduction of copper and mineral oils in organic farming

- **Adapt the EU registration process for active substances of plant protection products to plant extracts**, in order to facilitate their access to the market and their availability to farmers. Most of the alternatives to copper and mineral oils developed by RELACS are plant extracts. If the registration process does not evolve, any further upscaling of these alternatives will not be possible.
- **Provide public subsidies for applications for the registration of natural substances in niche markets or of public interest**, where the return on investment for a private company is low or non-existent.
- **Provide funding for continuous research on alternatives to contentious inputs**, especially as no alternative is ready to be transferred to the market in the short term. It is also important to finance breeding programmes for resistant varieties, and other preventive measures.
- **Involve farmers through participatory research**: support on-farm trials and participatory plant-breeding programmes.
- **Support the market development of new alternatives**, involving the whole value chain: farmers, consumers, and manufacturers.
- **Provide financial and technical support to farmers**, as the adoption of alternatives to copper and mineral oil is likely to require additional efforts and costs for farmers due to several changes in cropping practices and input supply. Member States should explore the possibilities offered by the Common Agricultural Policy in this respect.

### RELACS contribution to the EU Green Deal

The European Farm to Fork strategy has set a target to reduce the overall use and risk of chemical pesticides by 50% by 2030. Achieving this ambition will only be possible if farmers have access to alternatives, such as those developed in RELACS. The EU legislative framework on the authorisation of active substances and plant protection products should therefore evolve and be adapted to natural substances. However, a successful reduction of chemical pesticides cannot rely solely on the availability of alternatives based on natural substances. A paradigm shift is needed towards a systemic approach to plant health, where preventive measures and biodiversity enhancement are key components of the plant protection strategy, such as in organic farming.

Link to the roadmap:

[https://relacs-project.eu/wp-content/uploads/2022/04/RELACS\\_D7.4\\_European\\_roadmap\\_PPP\\_202204\\_final.pdf](https://relacs-project.eu/wp-content/uploads/2022/04/RELACS_D7.4_European_roadmap_PPP_202204_final.pdf)

### About this factsheet and RELACS

<p><b>Publisher:</b>          Publisher:          IFOAM Organics Europe          Rue du Commerce 124, BE-1000 Brussels          info@organiceurope.bio, <a href="https://www.organiceurope.bio/">https://www.organiceurope.bio/</a>          Author: Mathilde Calmels          Editor: Bram Moeskops</p>	<p><b>RELACS:</b> 'Replacement of Contentious Inputs in Organic Farming Systems' (RELACS) builds on the results of previous research projects and takes far-advanced solutions forward. As a system approach to sustainable agriculture, organic farming aims to effectively manage ecological processes whilst lowering dependence on off-farm inputs. The RELACS partners will evaluate solutions to further reduce the use of external inputs and, if needed, develop and adopt cost-efficient and environmentally safe tools and technologies.</p> <p><b>Project website:</b> <a href="http://www.relacs-project.eu">www.relacs-project.eu</a></p> <p><b>Social media:</b> Facebook (<a href="#">RELACSeu</a>) &amp; Twitter (<a href="#">@RELACSeu</a>)</p> <p>© 2022</p>
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