

08-053 — Upscaling efficient alternatives for contentious inputs in organic farming – the recently funded EU-project “SCALE-it”

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Aims and objective of „SCALE-it“

Contentious inputs in plant protection such as copper, mineral oil or Spinosad, are still widely used in organic farming due to limitations of alternatives in terms of (i) availability (ii) costs (iii) information on methodology of use, efficacy and benefits to the environment and (iv) acceptance by farmers and consumers. On this background, tools, strategies and techniques are applied in the recently funded EU-project SCALE-it, which starts in May 2025 and runs over four years. The key objective of SCALE-it is to increase the availability, accessibility and adoption by farmers of cost-effective alternatives and thus to support the objective of the EU Farm to Fork strategy through the development, testing and promoting of alternative solutions to contentious inputs in organic production. In SCALE-it contentious inputs for plant and animal production are addressed, including plant protection products, fertilisers/manures from problematic sources, antibiotics, anthelmintics, and vitamins from synthetic or GM origin.

Uptake of large-scale production and use of alternatives is currently hampered by (i) slow, complex and expensive registration procedures, (ii) lack of confidence by users and investors, (iii) the expectation of 1:1 replacement of contentious inputs, and (iv) partial lack of information on the mechanisms of action and side effects on the environment. SCALE-it addresses all aspects.

Core of the project is the upscaling of alternatives and the demonstration of strategies that reduce / replace the respective contentious inputs in around 70 on farm demonstration trials across Europe. Wherever possible, system approaches including e.g. variety selection, agronomic techniques, improved application techniques and alternative products are applied. SCALE-it builds on collaboration with “local ambassadors”, i.e. renowned regional advisory professionals with profound experience in their disciplines providing direct access to farmer groups.

With respect to crop protection and reduction of copper, mineral oil and Spinosad, 29 demonstration trials, each running for at least two years, will take place. Field crops addressed in the project are grapevine, table grape, apple, olive, citrus, potato, carrot, tomato and in addition basil, cucumber and tomato under protected cultivation. The alternatives in SCALE-it are based on solutions, developed in former projects, such as the H2020 projects Organic-PLUS and RELACS. Plant extracts and other natural substances, mating disruption by vibrational devices

and mechanical devices for beetle collection will be tested here. These alternatives have already reached high technology readiness levels (TRL) and will be further developed in the project.

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