

Improving the availability of plant protection solutions in minor uses of vegetables by collaborative work in the European Commodity Expert Group fruits and vegetables

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European Minor Use Structures

Minor uses in plant protection are areas of usage of minor economic impact. For some areas of minor uses no appropriate control solutions (chemical, biological or mechanical) are available for practical usage. This relates specifically to many vegetable crops, small fruits or ornamental crops.

In 2015, the European Minor Use Coordination Facility (MUCF) has been established. It is located at the EPPO (European and Mediterranean Plant Protection Organization) in Paris. The MUCF provides administrative and technical support to the European Commodity Expert Groups (CEGs).

The CEG fruits and vegetables is the platform for collaborative work of EU member states to find and to promote solutions for minor uses in fruits and vegetables. The work presented here is part of a joint project of the German grower associations DBV and ZVG, and the JKI.

Collaborative work in the European Commodity Expert Group (CEG) fruits and vegetables



European Commodity Expert Group
fruits and vegetables

- Representatives of 15 EU member states at present (national minor use experts, representatives of growers associations or grower groups)
- Biannual meetings organized by the MUCF

Project-based collaborative work

- Agrees on needs and projects
- Initiates efficacy and residue trials
- Encourages data exchange among the MS
- Invites companies to present their perspective
- Encourages companies to collaborate in projects with the CEG

Ongoing efficacy trials
in several EU member states

- Herbicides to control *Poa annua* and *Senecio vulgaris*
- (Bio)Fungicides to control downy mildew in vegetables
- (Bio)Insecticides to control thrips in vegetables and strawberries

Example from Germany

The JKI in Braunschweig conducted efficacy trials in leek with biological products for control of thrips. Preliminary results of the JKI trials are presented.

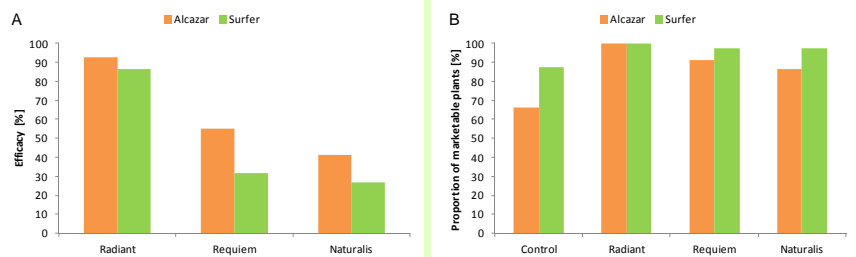
Actives and products tested 2015 – 2017 by the JKI

Active substance (approval)	Product (Company)
<i>Beauveria bassiana</i> strain ATCC 74040 (30/04/2019)	Naturalis® (CBC (Europe) S.r.L.)
<i>Beauveria bassiana</i> strain GHA (30/04/2019)	Botanigard® (Certis)
<i>Beauveria bassiana</i> strain PPRI 5339 (pending)	Velifer® (BASF)
<i>Chromobacterium subsugae</i> strain PRAA4-1T (pending)	Grandevo® (Marrone)
Garlic extract (31/08/2020)	ECOguard® (Ecospray)
<i>Isaria (=Paecilomyces) fumosoroseus</i> strain Apopka 97 (31/12/2030)	PreFeRal® WG (BIOBEST)
Maltodextrin (30/09/2023)	Eradicoat® (Certis)
<i>Metarhizium anisopliae</i> (30/04/2019)	Met 52® Granulate (Novozymes)
Orange oil (30/04/2024)	Prev-AM® (Oro Agri, FR)
Terpenoid blend QRD-460 (<i>Chenopodium ambrosioides</i>) (10/08/2025)	Requiem™ prime (Bayer)

Preliminary results to control thrips in leek

Monitoring, treatments scheduled, and assessment

- Weekly monitoring of thrips incidence
- Treatments according to action threshold (action threshold > 50% infested plants)
- Final assessment at harvest; assessment of leaf injury (% leaf area)
- Marketable plants: leaf injury ≤ 3%



Effects of two different biological insecticides in comparison to the chemical control Radiant (Spinetoram) shown as (A) efficacy (reduction of injured leaf area in %) (B) proportion of marketable plants after trimming (removal of the three outer leaves).

The average leaf injury of control plants was 3.5% (Alcazar) and 2.0% (Surfer). Radiant (Spinetoram) was applied as chemical control. Plants were treated three times with Radiant and four times with Requiem and Naturalis, respectively. Trials were performed with leek varieties of different susceptibility (Alcazar more susceptible than Surfer).

Websites for further information

In Germany

- Minor use structures: <http://lueckenindikationen.julius-kuehn.de/>
- Joint project for minor uses: <http://www.verbundvorhaben-lueckenindikationen.de/>

In the European Union

- EU minor uses: <https://www.minoruses.eu>
- Information on needs and CEG projects: <http://www.eumuda.eu>

Further reading:

Lamichane et al., 2015: Challenges and opportunities for integrated pest management in Europe: A telling example of minor uses. Crop Protection 74, 42-47.