Edition #20 July 2024

>>> NEWSLETTER <<<

EUROPEAN MINOR USES COORDINATION FACILITY

Minor uses, major importance.


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TOP NEWS

SUMMER EDITION

By the MUCF team

>>> DEAR MUCF COMMUNITY

As the summer holidays are getting closer, the European Minor Uses Coordination Facility (MUCF) would like to wish you a wonderful summer. We are enthusiastic to share with you the latest news and developments of the Facility.

READ MORE <<<

The MUCF Team hopes that you enjoy its 20th Newsletter, which contains news about forthcoming events and updates of the Spring expert groups 2024 meetings.

In 2024, the MUCF will continue to support it members in their work on finding solutions to guarantee the continuation of minor crop production in Europe. The Facility will ensure that collaboration and communication between experts continues, leading to positive impacts.

MinorUses

MUCF AUTUMN MEETINGS 2024

The MUCF Autumn 2024 meetings will be held in-person, on October 29th-31st in Budapest. They will be hosted in the K+K Hotel Opera.

TENTATIVE CEGS, REEG AND HEG AUTUMN 2024 MEETING SCHEDULE

(timing might still be adjusted, registration for the meetings open until 2024-07-05)

Residues expert group (ReEG):	2024-10-29; 09:30 – 12:30
Horizontal expert group (HEG):	2024-10-29, 13:30 – 17:30
Commodity Expert Groups (CEG)	
CEG Fruits & Vegetables:	2024-10-30, 09:30 – 15:00
CEG Tobacco:	2024-10-30, 09:30 – 15:00
CEG Herbs & Spices:	2024-10-30, 09:30 – 12:00
CEG Hops, Part 1:	2024-10-30, 13:00 – 15:00
Field trip & Social diner:	2024-10-30, 15:30 – 23:00
Workshop MUCF:	2024-10-31, 09:00 – 10:00
CEG Ornamentals:	2024-10-31, 10:30 – 17:30
CEG Seeds:	2024-10-31, 10:30 – 17:30
CEG Hops, Part 2:	2024-10-31, 10:30 – 15:30

CEG Mushrooms: the autumn meeting of the CEG Mushrooms will be held online. The date will be communicated as soon as possible.

CEG Rice: the position of chair of the CEG Rice is vacant.

MUCF SPRING MEETINGS 2024

TThe MUCF 2024 Spring meetings were held remotely over several days to allow cross-participation for all the CEGs, the HEG and the ReEG. A participation overview per individual CEG is provided below.

PARTICIPATION OVERVIEW FOR THE SPRING MEETINGS 2024

HEG	44 participants
ReEG	28 participants
CEG Fruits & Vegetables	31 participants
CEG Seeds	16 participants
CEG Tobacco	13 participants
CEG Ornamentals	24 participants
CEG Herbs & Spices	14 participants
CEG Hops	19 participants

SOME HIGHLIGHTS FROM THE SPRING MEETINGS

>>> CEG FRUITS AND VEGETABLES

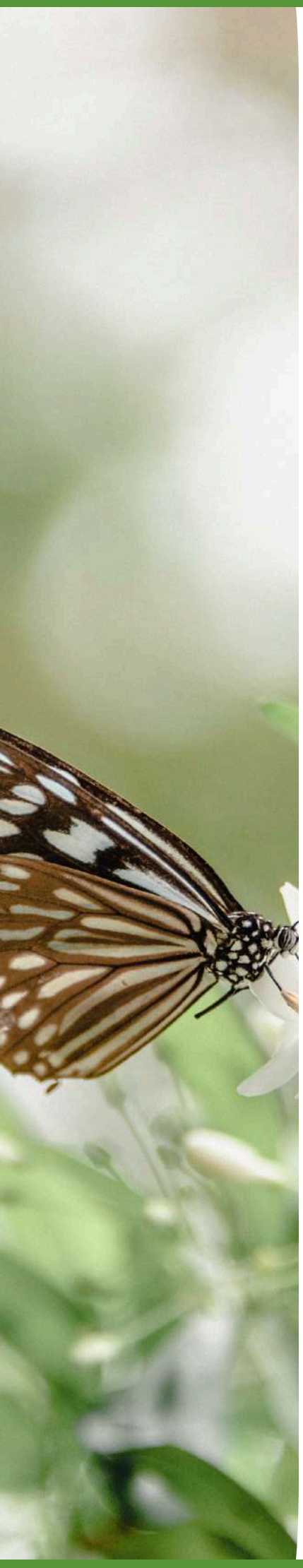
The experts discussed the latest developments regarding several active substances (e.g. Spirotetramat, Cyazofamid, Metalaxyl-M). As a follow-up to these discussions, a questionnaire was circulated among the experts regarding the authorisation status of the active substance Spirotetramat, and its importance in the different European countries. The outcome of this study will be presented during the Autumn meeting 2024.

The Weed Session of the CEG Fruits and Vegetables, welcomed a guest speaker. Mr Simon Gasser from Ecorobotix gave an informative presentation on Artificial Intelligence (AI) and high-precision spraying. The combination of these 2 technologies allows both the reduction of drift and the reduction of the amount of pesticides sprayed on the field.

>>> CEG HERBS AND SPICES

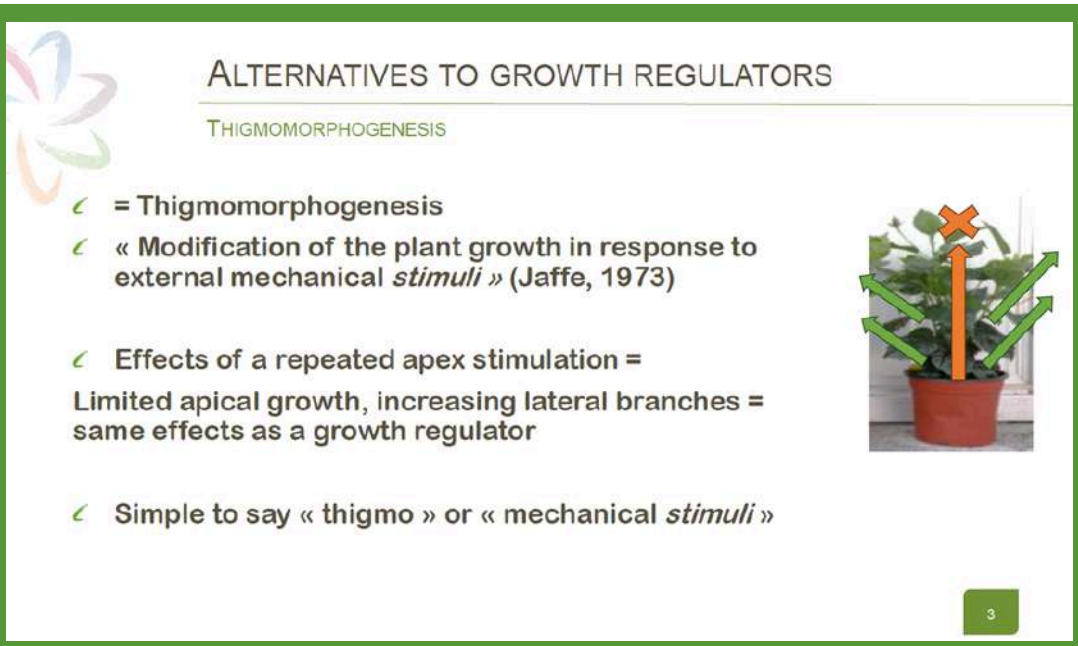
The experts were updated concerning the registration approval status of several active substances, and current pesticide issues affecting their main commodities.

One particularly recent issue concerns the cultivation of wasabi. One of the natural compounds produced by the wasabi leaves (Carbon disulfide CS2, a compound occurring naturally as a metabolite of glucosinolates, and present in high levels in all brassicas) can create false positives in the detection of residues of Dithiocarbamate fungicides. It is worth noting that there is currently no Maximum Residue Limit (MRL) set for Dithiocarbamate on wasabi leaves in Europe, which has implications for wasabi production as addressed by an Irish expert.



The main focus of the meeting was the subject of plant growth regulators (PGR). Two guest speakers were invited to present their work on this topic:

- Mr Tom Hebbinckuys, who discussed the research conducted by Astredhor on mechanical alternatives to PGR, leading to comparable results without the use of PGR products.

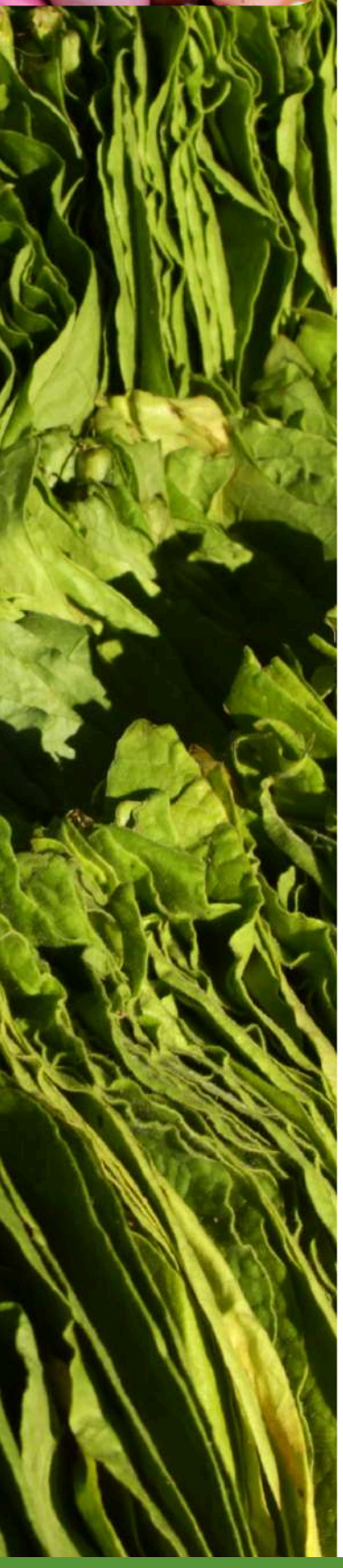


Presentation given by Mr Tom Hebbinckuys on the alternatives to PGR.

- Mr Will Aelbrecht, from Fine Agrochemicals, updated the experts on the European renewal status of the active substance Daminozide, a PGR widely used on ornamental plants.

Mr Koen Merkus from Biobest updated the group on high-tech Integrated Pest Management (IPM) solutions, such as the use of scouting data applications and automated monitoring of moth pests. These technologies enable earlier pest detection with increased accuracy and reduced time compared to detection by a human.

Moreover, the experts were apprised of the potential consequences of the withdrawal of two active substances—Spinetoram and Spirotetramat—which are crucial to the control of thrips, whiteflies, and scale/mealybugs in ornamental production.



>>> CEG SEEDS

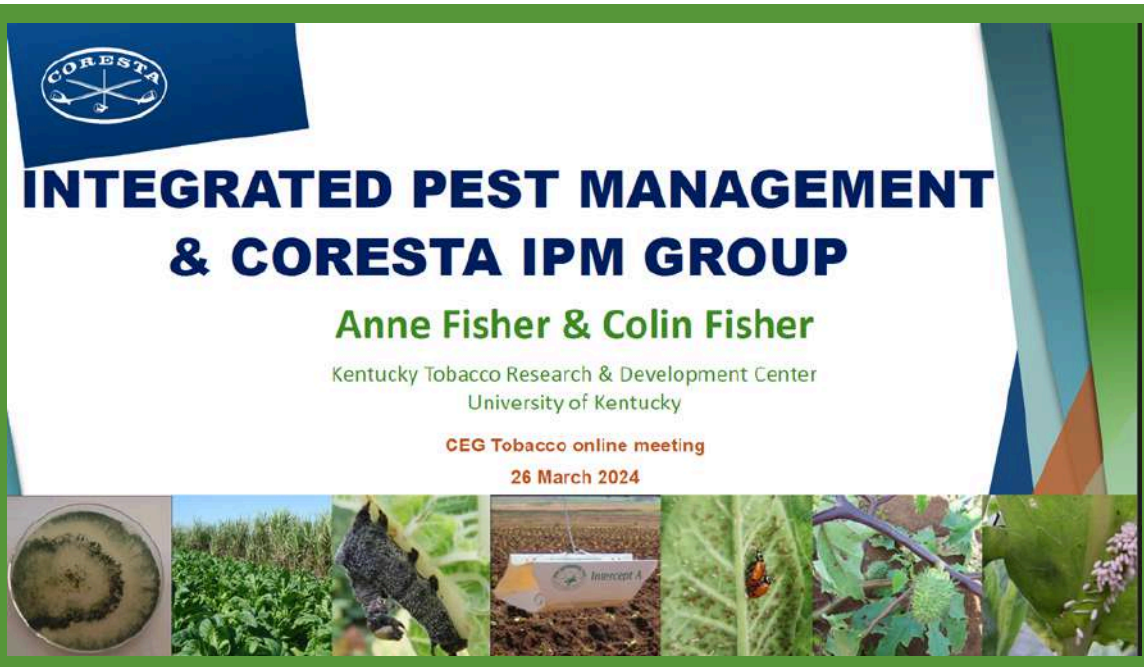
The experts from the CEG Seeds were updated on the latest developments regarding the registration renewal status of Metalaxyl-M and Fludioxonil in Europe, two fungicides of importance for both seed production and protection. Mr Artur Paszkowski (Poland) gave a presentation on the needs and priorities for seed treatment and seed production in Poland (e.g. lack of effective insecticides against aphids as vector of viruses on seed potatoes).

>>> CEG TOBACCO

The experts welcomed two guest speakers:

- Ms Anne Fisher from the Kentucky Tobacco Research and Development Center of the University of Kentucky, presented the latest research conducted by their department in the field of IPM on tobacco crops, e.g.:

1. Use of a ‘dead period’ of 6 weeks with no tobacco crop growing to control tobacco bushy top virus (*Umbravirus nicotianae*, EPPO Code TBTV00). The implementation of this ‘dead period’ limits the multiplication of aphids, the main vector of this virus.
2. Hygiene and sanitation measures to control tobacco mosaic virus, (*Tobamovirus tabaci*, EPPO Code TMV000) which can be easily spread mechanically (e.g. via hands and tools).



Presentation from Ms Anne Fisher on Integrated Pest Management

- Mr Przemysław Noworyta, representing UNITAB (the European Tobacco Growers Association), presented an overview of the Association's history, its stated objectives and current activities, and the challenges currently faced by tobacco growers in Europe.

Hop experts discussed the issues of European hop protection. German experts expressed their concern about the forthcoming changes in EU Maximum Residue Limits (MRLs) restrictions, e.g. for the active substances Bifenazate and Dimethomorph, which would adversely affect hop products already produced under the old MRLs and currently stored in warehouses.

It can be recalled that most harvested hops are processed into hop products (e.g. hop pellets or hop extract) and can be stored for up to 10 years without any loss of quality.
Where the new MRL classification of an active substance is based on human health concerns or the existence of data gaps, hops treated with substances for which the MRL has been changed, including those from earlier years of production, will have to comply with the new, lower MRL in order to be saleable. The potential effects on trade will not be considered, and no or only a short transitional period will be granted. Some brewers' association are seeking clarification about whether the beer that is already on the market must also comply with the new MRL values.

- In the case of **Bifenazate** (used to control spider mites), the MRL was reduced from 20 ppm to 0.05 ppm in the EU due to a lack of data, but remained at 15 ppm in the USA, and 20 ppm in Japan, China and the CODEX MRL. Hops produced outside the EU with the higher MRL, or hops produced in the EU in previous years with the old MRL of 20 ppm, cannot be used by European brewers from October 2024 onwards. In the case of Bifenazate, the loss along the entire value chain is estimated at 100 million EUR.

- **Dimethomorph** has been classified as hazardous to health in 2024. It is likely that the effects on trade will not be considered in the new procedure for setting the MRLs for Dimethomorph. In the case of Germany, the Czech Republic and Austria, this would have an impact on produced hops, as Dimethomorph is regularly used to control downy mildew, on both hops and other crops such as grape for wine production. If hops produced under the previous MRL for Dimethomorph were to be considered unmarketable, this would result in estimated economic losses of around 300-500 million EUR over the next decade for the German hops industry alone, as hop products are stored for up to ten years to compensate for crop yield variation over the years.

Retrospective MRL changes will have an economic impact if the effect on trade is not taken into account when setting MRLs for commodities that are mainly produced to be stored and processed later (e.g. hops -> beer, grapes -> wine, processing tomatoes -> canned tomatoes, etc.).

The MUCF will keep its members updated about the outcome of this issue.

REEG

The experts were updated on the issues encountered in caraway production (*Carum carvi*, EPPO Code CRYCA), a minor crop of importance in Finland (28% of the world's production in 2011 was produced in Finland). Caraway seeds are commonly used as spices, while the aromatic oil of caraway is a component of cosmetics and medicines. Additionally, caraway plays a valuable role in crop rotation to improve soil quality for subsequent crops.

However, providing sufficient data for setting the MRLs and registering plant protection products for caraway poses significant challenges, particularly due to the high number of studies to be carried out and included in the application dossier.

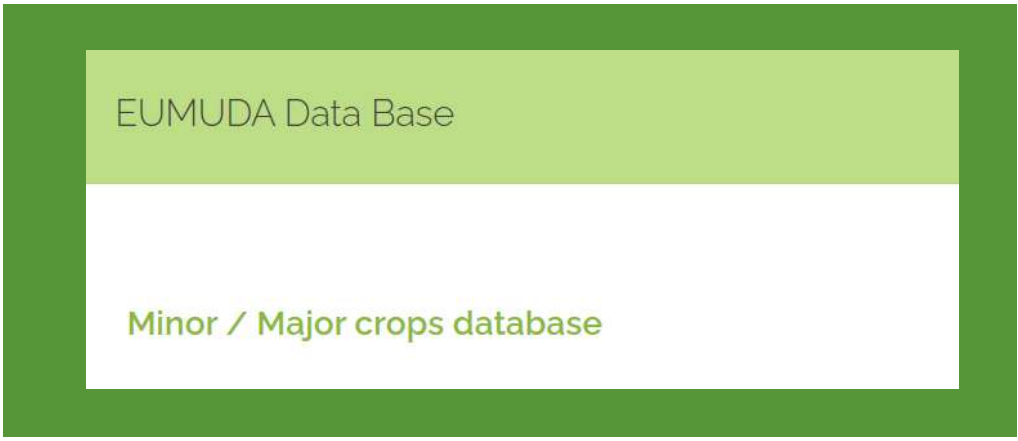
Additional residue extrapolation possibilities would be beneficial in this case.

More details on this issue will be presented and discussed further during the Autumn meeting 2024.

OTHER MUCF NEWS

EUMUDA UPDATES

The EUMUDA Minor/Major crops database now contains minor and major crop status information from 17 countries. The information of Italy and Slovakia was added recently and information from more countries are to be added in the coming months!



CHANGE IN MUCF STAFF

Mr Oualid Sellami joined the MUCF team on February 19th, 2024, as new MUCF IT Officer. He previously specialised in designing and programming applications for a wide range of different customers.

RADISH LEAVES

Following a decision from the Standing Committee on Plants, Animals, Food and Feed (SCoPAFF) to allocate the radish leaves to the MRL commodity group 'Kales' with an entry into force in the beginning of 2025, the MUCF vegetables experts raised the concern that the chosen MRL commodity group might endanger the 'small radishes' production in Europe.

MUCF experts from Italy, Germany, Belgium, the Netherlands and France have been working together to advocate for the allocation of leaves of small radishes *Raphanus sativus* (EPPO code RAPSR) to the MRL commodity group of Roman rocket/rucola.

At the SCoPAFF residue meeting held on April 22-23, 2024, the committee voted in favour of this proposition. More detailed information on this topic can be found in the SCoPAFF meeting report (chapter B04).

BELGIAN PLANT PROTECTION PRODUCTS DATABASE 'PHYTOWEB'

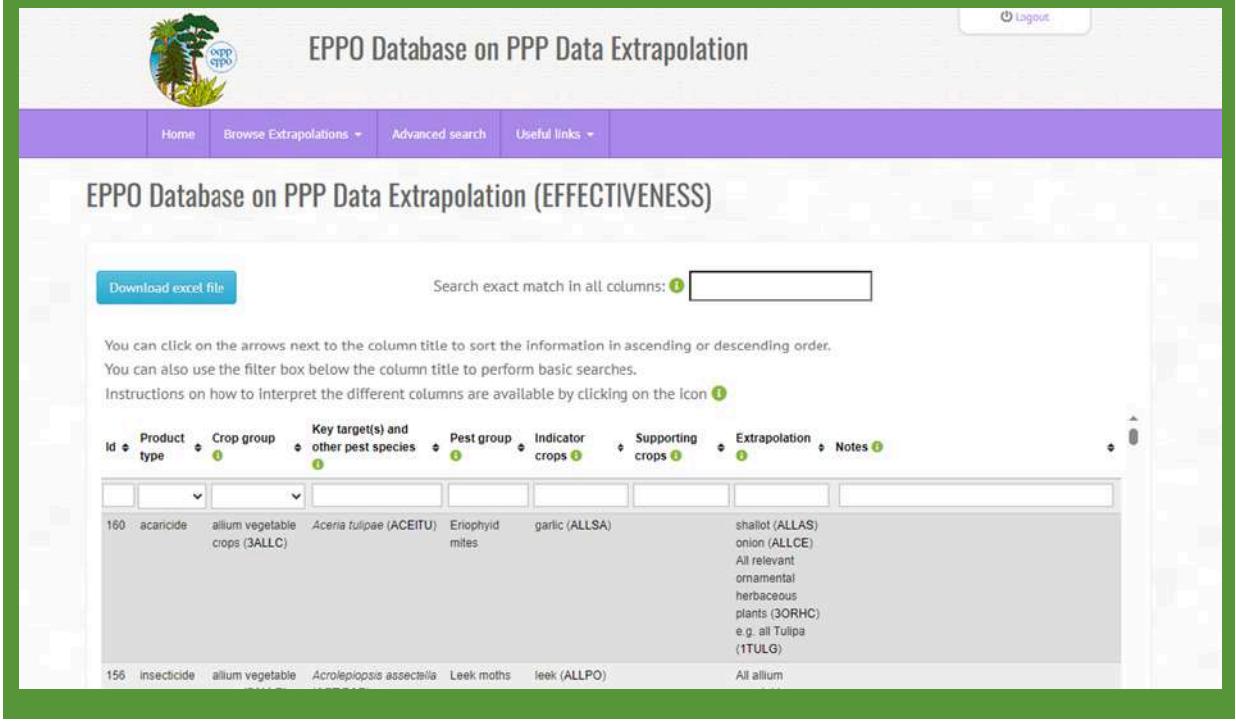
The Belgian website Phytoweb now allows searches for plant protection products (PPP) emergency authorisations in Belgium. All emergency authorisations which were valid for at least one day in 2024 are included in the search tool. A separate list with the previous authorisations is also available.

PHYTOWEB

Plant protection and Fertilising Products

NEWLY LAUNCHED: EPPO DATABASE ON PPP DATA EXTRAPOLATION

The EPPO database, available at https://extrapolation.eppo.int/, provides detailed lists of acceptable extrapolations, for regulatory authorities and applicants, in the context of the registration of plant protection products for minor uses. The database should be used in conjunction with the EPPO Standard PP 1/257 Efficacy and crop safety extrapolations for minor uses (link: https://pp1.eppo.int/standards/PP1-257-2).
Instructions required to use the database are provided on the website.



GLOBAL MINOR USE SUMMIT IV

The MUCF participated in the Global Minor Use Summit IV in Madrid from February 5th to 9th. The Summit was organised by the US Minor Use Foundation and brought together around 170 participants from 41 countries worldwide. The MUCF gave a presentation during the panel dedicated to 'International Collaboration' and was involved in the Organising Committee of the Summit. The MUCF presentation was focused on the structure and missions of the Facility, as well as some selected future work developments. All presentations given during the Summit are available on the Foundation's website. To address minor uses issues in an effective way, it is mandatory to collaborate across all stakeholders.

Follow the **MUCF on LinkedIn** to stay up-to-date with the latest MUCF updates and upcoming events.
#MinorUsesMajorImportance and #LetsTalkAbout MinorUses

LITERATURE

‘OVERCOMING BARRIERS TO CROP DIVERSIFICATION UPTAKE IN EUROPE: A MINI REVIEW’.

Brannan, T., Bickler, C., Hansson, H., Karley, A., & Weih, M. (2023). Frontiers in Sustainable Food Systems, 7, 1107700. https://doi.org/10.3389/fsufs.2023.1107700

Abstract: Crop diversification (CD) encompasses practices such as extending crop rotation, cover cropping and intercropping practices, and **growing minor crops**. It has attracted increasing interest because it can produce both private benefits for farmers, including improved crop and soil health, and reduced inputs, and public goods for society, including **greater biodiversity**, **carbon sequestration**, and **climate resilience**. Nevertheless, CD is not widely practiced in Europe. The paper uses a conceptual framework based upon the literature on barriers to agricultural innovation and CD to guide a systematic-like literature review of existing review articles on the barriers to CD in Europe and a review of research from the European Crop Diversification Cluster, comprising six EU research projects. The research compares barriers to CD uptake and identify opportunities to accelerate CD uptake, drawing four main conclusions:

- The barriers to CD are influenced by many factors (specific crop and cropping method, geographical region, farmer characteristics, supply chain or market conditions, and the institutional environment).
- The barriers to CD uptake are interconnected and occur at multiple points along the supply chain.
- Transdisciplinary agricultural research is needed to understand the on-farm reality and its influence on CD uptake.
- Farmers' decision-making is unpredictable and likely to focus on utility rather than profit maximization.

‘EFFECTS OF PRE-EMERGENCE HERBICIDES ON WEED CONTROL AND YIELD OF SAFFLOWER (CARTHAMUS TINCTORIUS L.) IN CENTRAL ITALY.’

Pannacci, E., Farneselli, M., Monni, V., & Tei, F. (2024). Agronomy, 14(3), 482. https://doi.org/10.3390/agronomy14030482

Abstract: Safflower is a multipurpose crop with several uses that can offer benefits to rainfed cereal-based cropping systems due to its tolerance to cold, drought, salinity, and its reduced need for agricultural inputs. Safflower requires good weed control for optimum yields because it is a very poor competitor with weeds, especially at the early growth stage, but registered pre-emergence herbicides are not available. This research investigated the effects of several pre-emergence herbicides on weed control and the yield of safflower (**minor crop in Italy**) in central Italy (minor crop in Italy), through two field experiments in 2019 and 2020.

Conclusion: Aclonifen, s-metolachlor, and propyzamide are recommended for pre-emergence use in safflower cultivation due to their low phytotoxicity and effective weed control. Metazachlor and metribuzin are not advisable due to their high phytotoxicity on safflower.

‘CROP DIVERSITY BUFFERS THE IMPACT OF DROUGHTS AND HIGH TEMPERATURES ON FOOD PRODUCTION.’

Renard, D., Lucie Mahaut, L., & Noack, F. (2023). Environmental Research Letters 18 045002

Abstract: Weather extremes like droughts and heat waves are increasingly affecting global agricultural production and food security. While the impacts on major crops are well-known, the broader **potential of crop diversity to mitigate these effects** has not been fully explored. This study evaluates whether increasing crop diversity at the country level can enhance resilience against weather extremes, using 58 years of data on weather, crop yields, and agricultural revenues for 109 crops across 127 countries.

Key findings reveal that greater crop diversity within countries significantly reduces the negative impacts of droughts and high temperatures on agricultural outputs. Specifically, the presence of **minor, drought-tolerant crops** lowers the average sensitivity of national crop portfolios to drought, leading to better yield and revenue stability. This resilience is particularly crucial for poorer developing countries, which are more vulnerable to climate change.

The study underscores the **unexploited potential of crop biodiversity to enhance agricultural resilience**, offering a vital strategy for adapting to climate change impacts.

‘UNVEILING THE HIDDEN GEMS: MINOR CROPS AS CATALYSTS FOR SUSTAINABLE DEVELOPMENT, BIODIVERSITY CONSERVATION, AND ECONOMIC RESILIENCE’.

Mattas, K., Nastis, S. A., Michailidis, A., Tsakiridou, E., & Spyridon, K. (2024). Sustainable Development. https://doi.org/10.1002/sd.2930

Abstract: The publication emphasizes the critical role of **minor crops** in achieving regional **sustainable development**, preserving **biodiversity**, and ensuring **food security**. Minor crops, such as blackcurrant, rice, and sunflower, offer significant environmental and economic benefits, particularly in addressing climate change, biodiversity loss, desertification, and soil salinity. These crops provide local farmers with income stability and resilience, contributing to regional economic growth.

A case study from Greece highlights the potential of these minor crops in promoting sustainable development. The study assesses the economic and environmental impact of these crops across three rural territories in Greece. Despite occupying less than 4% of total agricultural land, these crops are mainly cultivated in marginal, mountainous, and insular regions. The findings reveal that these crops are more profitable and environmentally friendly compared to other crops. They significantly contribute to the regional economies, supporting economic growth while conserving agricultural land.

The publication concludes by advocating for the **prioritization of minor crop cultivation and preservation** by policymakers and agricultural practitioners. This approach is essential for sustainable development, biodiversity conservation, and regional economic growth.