

NEWSLETTER #19 BELGIUM

12 June 2024

Every two weeks, this newsletter will be prepared by a different Alliance member.

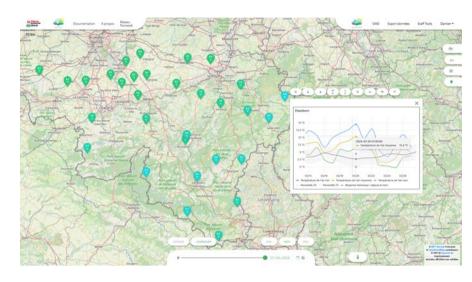
Today we are happy to share a contribution from the Walloon Agricultural Research Centre (CRA-W) in Belgium.

Agromet.be: online decisions support tools for a sustainable use of plant protection products in Wallonia, Belgium

Agricultural Decisions Support Systems (DSSs) are crucial for guiding farmers toward a major reduction of pesticide use in agriculture. These tools use weather data to model the risk of crop infection, enabling farmers to minimize pesticide use by spraying only when necessary. Numerous models for predicting risk of crop pests and diseases are documented in the scientific literature, however the final step towards an operational tool accessible to farmers is often lacking.

The Walloon Agricultural Research Centre has launched Agromet.be, a web application providing open access to several DSSs including orange wheat blossom midge and four wheat fungal diseases (Septoria tritici blotch, brown and yellow rust, scab). Users can also access weather data from 32 weather stations in near-real-time and download long-term historical data. Given the high sensitivity of DSSs to weather data, a particular focus is placed on data quality through regular preventive maintenance of weather stations and thorough daily quality control.

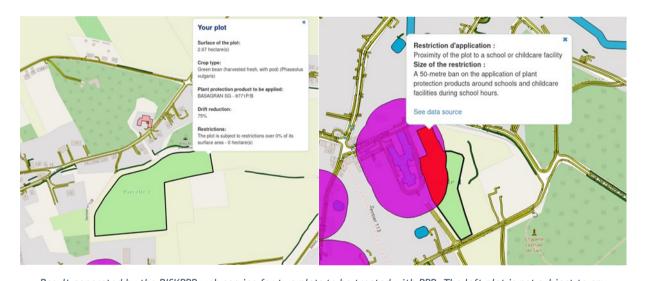
Interested? Visit www.agromet.be for more information



RISKPPP: A decision-making tool to prevent point source pollution by plant protection products

Many regulations define buffer zones to prevent contamination of sensitive areas (erosion-sensitive, karstic or low carbon content areas), and vulnerable populations (childcare facilities, hospices for the elderly). However, as these buffer zones can vary in size depending on the product, the equipment, the crop type and the spraying techniques, it is difficult for farmers to identify which restrictions apply to each of their plots and therefore to comply with them. The Walloon Agricultural Research Centre in partnership with the Public Water Management Company is developing a cartographic platform to address this issue. By providing the above-mentioned parameters, farmers can identify the areas where they can or cannot apply their product. This output can then be downloaded to a tractor's console so that spraying stops automatically when the tractor leaves the authorised area.

Stay tuned to our (Official website, LinkedIn, Facebook, Youtube Channel) for the latest updates and news! For more information, please contact Julien Herinckx or Damien Maillard.



Result generated by the RISKPPP web service for two plots to be treated with PPP. The left plot is not subject to any restrictions, unlike the right plot, which is close to a school. Users can interact with each of the restriction zones to understand their nature and origin.

A better understanding of the pesticides contamination sources of drinking water catchments to improve groundwater quality

In the Walloon Region (Belgium), agricultural systems are mainly characterized by intensive production and consequently high pressure on the environment, particularly the water compartment. As a result, the threshold of $0.1 \mu g/l$ for a pesticide's active substance (or some metabolites), defined by the Walloon Water Code for contaminated drinking water, is regularly exceeded in water catchments. To improve groundwater quality, the Catchment Pesticide Diagnosis Unit (CDPU) was set up in 2005 as part of a collaboration between the Public Water Management Company (SPGE) and the Walloon Agricultural Research Centre (CRA-w). This Unit aims to identify the sources of pesticide contamination of a water catchment area. Once identified, it recommends action to be taken in this area.

More information can be found at this <u>link</u>.



Using an unbiased index based on active substances per crop to help Belgian farmers for reducing pesticide treatments



Reduction of the use of plant protection products (PPP) is one of the main objectives of the Farm to Fork Strategy, aiming to make food systems healthy and environmentally-friendly. The Walloon Region in Belgium is committed to a strong prevention policy. In order to be able to monitor PPP applications at farm level, several indicators from quantities or frequency can be used. An unbiased index called "ISAC" based on active substances per crop has been developed to help farmers for reducing efficiently PPP use annually and by crop (maize, sugar beet, potatoes, cereals...). Moreover, an overall indicator derived from ISAC, integrating (eco)toxicological data from EFSA (European Food Safety Authority), such as Pesticide Load from Denmark, is under development. More information can be found at this link.

This is the newsletter of the European Research Alliance Towards a chemical pesticide

free agriculture

Visit the Alliance's website: https://www.era-pesticidefree.eu/ This issue has ben prepared by **CRA-W** as a member of this Alliance.

If you would like more information about this issue, feel free to contact them.

