



European
Commission

LIFE – F3: ‘Reducing pesticides in your meals’

Reducing the use of biocidal products and/or pesticides through advanced pesticide sprayer and computer cloud technology

The ineffective application and overuse of plant protection products brings pesticides to your table

Pesticide residues are the most important food-related concern for EU citizens, and the European Food Safety Authority (EFSA) announced [that more than 97.4% of food products contain pesticide residues](#). Moreover, pesticide overuse is widespread and imprecise application causes serious health problems and dangerous pest resistance.

Large amounts of [conventional spraying equipment are still highly inefficient](#), with over 50% of pesticides not reaching the target organisms. Instead, they contaminate the environment, with considerable negative effects for biodiversity, bees, bystanders, and the ecosystem as a whole.

Moreover, the amount of [plant protection products \(PPP\) in agricultural production produces significant greenhouse gas emissions](#) considering the growing population worldwide. Therefore, incorporating measures for sustainable agricultural production could be considered as one of the key pillars of the green transition.

Improve the quality of crops and save the resources due to an innovative data-based solution for all specialty crops

The LIFE - F3 project consortium led by Pulverizadores Fede S.L.U, has validated the [highly efficient advanced pesticide sprayer](#) (the solution) and a [digital agronomic management tool](#) – Specialty Crops Platform (SCP) from which work orders are sent to the operator for the equipment to be adjusted automatically during the project’s lifetime. This precision spraying solution reduces up to 47,5% the drift, up to 25% the pesticides use, 4l/h of fuel consumption, around 18% of water use and provides real traceability.

The sprayer, together with data, [precisely adapts to the field zone and plant conditions](#) and therefore demonstrate how the [H3O technology performs intelligent and precise treatments](#) adapting the spraying to the Tree Row Volume (TRV). Through the combination of the technology and software solution, the user receives all of the data required for decision-making.

The solution has been successfully tested at multiple olive farms and vineyards in Portugal and Spain on the crops of consortium members Viñas del Vero and Monte Do Outeiro Sociedade Agricola, however, it could be utilised at any specialty crops farms worldwide. Furthermore, other consortium members, Tractores e Maquinas Agricolas de Estremoz and VIDAL Y BASOLS, who represent distributors, support the commercialisation of the solution which also includes educating and training the distributors to ensure the positive impact of the solution is as significant as possible.

In addition to undisputed environmental benefits of a [significant reduction of greenhouse gas emissions](#) the main benefits for the customers are savings of both fuel and PPP consumption.

Go green (a message from the project coordinating beneficiary - Pulverizadores Fede S.L.U)

“Go Green: Fede’s mission is to develop agronomic solutions that promote a high quality productive sustainable agriculture, profitable for farmers, environmentally-friendly and that improves the food security standards of society. Go green gathers our identity and commitment to lead the digital transformation in the specialty crops sector to reduce the environmental impact of the agriculture, increasing both sustainability and business performance”

Learn more

Project acronym: LIFE - F3

Reference: LIFE18 ENV/ES/000349

[Project website](#)

Do you want to benefit as well from support to commercialise your innovative solution?

Contact us at:

