IMPACT ACHIEVED

- Significant reduction in the amount of active substances applied, especially of synthesized pesticides.
- A great reduction in the use of phytosanitary products which are dangerous for the environment.
- More efficient pest control with a better crop health status.
- Higher economic cost associated to some of the new techniques applied, but resulting in a distinctive product with greater quality.

NEW GOALS

- Search for the right moment in which alternative substances have to be applied and define the pest threshold for every zone and situation.
- The need of new strategies in disease control in order to reduce the use of phytosanitary products.
- Continuous transfer of obtained results with new IPM techniques. Training and advice.
- Awareness in all the value chain, from producer to consumer.

PARTNER MEMBERS LOGOS











€ NEKEAS È





LIFE AGROINTEGRA

widely overcomes its objectives of reducing environmental risks by reducing the use of phytosanitary products in the protection of cereal, vegetables, fruit trees and vine crops.

(LIFE13 ENV/ES/000665)





Nafarroako Gobernua Gobierno de Navarra

Landa Garapeneko, Ingurumeneko eta Toki Administrazioko Departamentua Departamento de Desarrollo Rural, Medio Ambiente y Administración Local



ACHIEVED RESULTS



Pests: mating disruption is a very efficient technique against Grape moths and its economic cost is close to that of conventional pesticides. Therefore, there are currently viable alternatives to conventional pest management.

Diseases: the use of lower doses of copper is possible in the fight against downy mildew. Likewise, it is feasible to reduce sulfur by 80% with the implementation of other alternatives, although the cost is higher.

Soil management: inter-vine tillage nowadays is the best alternative to herbicides. The use of cover crops with non competitive species is a good alternative to conventional tillage. Staggered flowering period species benefit the presence of beneficial insects.



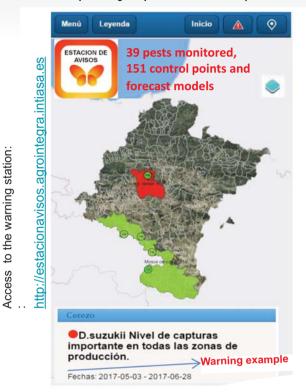
Pests: it is possible to maintain the yield and quality of products when using alternative products (pheromone mass trapping, bioinsecticides, beneficial insects and the installation of flower strips).

Diseases: there are no direct alternative methods of control available yet. Preventive measures and cultural methods are as relevant as crop and pests monitoring in order to keep an optimal product placement.

Weeds: an adequate control can be achieved with mechanical means (using hoeing machines).

New Collaborative Warning Station

Dynamic and updated information that forecast the evolution of pathological problems of the crops.



Its collaborative approach allows the implementation of new monitoring points and a continuous improvement of results.

Stakeholders' involvement

- 72 farmers from the agroindustry and cooperatives.
- Y63,22 ha of trials in two agricultural seasons
- 30 trials 18 real-scale demonstrations
- 3 transformations of experimental fields



FRUIT TREES

Pests: Red spider mite can be successfully controlled with a great amount of pesticide reduction by applying plant extracts and supported by the release of beneficial insects.

The use of **bioinsecticides** and the release of **beneficial insects** have controlled *Psylla pyri*.

Excellent results in the control of *Cydia pomonella* in pome fruit trees have been achieved using **mating disruption**.



Weeds: a satisfactory control of weeds has been achieved by a summer tillage, when followed by rains.

Diseases: The use of phytosanitary dose



reduction strategies for controlling yellow rust has been a complete success. The classification of breeds according to their tolerance is a preventive measure of great support.

Foot rot has been **reduced up to a 56,6%** by including sunflower in the **crop rotation** (two agricultural seasons average).

Access to culture guides: http://www.agrointegra.eu/es/tecnologia/guias-de-cultivo.html