





SUSTAINOLIVE.EU

# PORTANT...

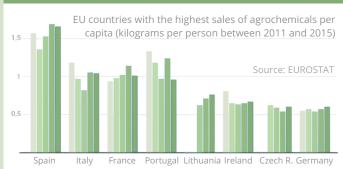
The EU agricultural policy considers that promoting biodiversity of olive groves is one of the pillars on which their management must be based. The two most important management practices to achieve this key goal are:

The maintenance of **cover crops** that provide

The **elimination of plant-protection products** 

REMARK

AUXILIARY FAUNA is defined as the group of animals, generally invertebrates (insects, arachnids and nematodes), which are useful to control potential crop pests.



Breaking this inertia will not be easy anywhere because of...

...the direct pressure that farmers suffer from the agrochemical lobby

...uses and traditions

...the trend to follow neighbours' examples

...lack of training and delegation of decisions to consultancies ...the use of information sources

that are biased or outdated, or prone to conflicts of interest

#### HAVE YOU EVER THOUGHT THAT...

most farmers will never have the opportunity to reherbicides and pesticides may pose on their healtn and

the environment ?

This project is part of the PRIMA program supported by the European Union

Providing farmers with this information in an accessible jargon and through a stimulating methodology is the responsibility of farming institutions, both private and public, and extension ser-

## HEALTH COMES FIRST

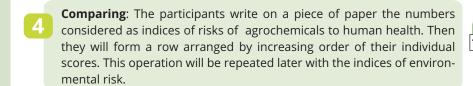
Improving health standards or (even better) avoiding illnesses are some of the most powerful stimuli favoring the shift of habits by the human being. However, considering this is a controversial issue, any educational activity dealing with the impacts on health of a professional practice as conservative as agriculture, must be approached with rigor and diplomacy, avoiding any sensationalism or unnecessary alarmism and also avoiding blame on farmers or other agricultural professionals.

### OUR PROPOSAL

- **Introducing the issue:** What are the impacts of plant protection products on human health and the environment that have been unequivocally proven by science?
- **Enunciating the metaphor:** Each participant throws some darts on a porexpan sheet where a series of cards with the names of some of the phytochemical product of use in the olive grove have been attached. As many attempts as necessary are allowed until one of the cards is hit. Product names remain hidden, so farmers can't know which product they're "shooting" for.

The metaphor: "Choosing a phytochemical product without rigorous criteria is equal to buying it blindly".

Doing the numbers: Each participant receives an information sheet that contains the risk indices of their respective phytochemical products on the health of humans (both on the farmer and on the consumer) and the environment. These indices have been comprehensively calculated and standarised by the College of Agriculture and Life Sciences at Cornell University (New York, USA). Each sheet also contains the list of mandatory messages of risk displayed on the agrochemicals packaging and the list of adverse health reactions included in their safety data sheets. Next, the participants will only have to add up the indices for the health and environment categories to obtain the extra info "risk indices" attributed to their products.



**Discussing**: The farmers analyze their own positions in the risk scale, and discuss the reasons that may have led them towards that position, especially in the case of those who occupy extreme positions.

Year 2012 Year 2016

INSECTICIDE

#### ACTIVE MATTER: DELTAMETHRIN

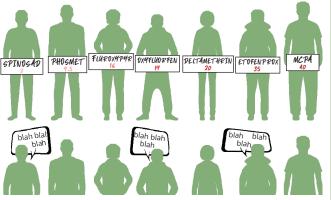
IMPACT INDICES

ON THE FARMER Contact toxicity: 3

ON THE CONSUMER

ON THE ENVIRONMENT

Toxicity to aquatic organisms: 25 Bird toxicity: 3 Bee toxicity: 15 Toxicity to beneficial insects: 22 Leaching potential: 1



**Proposing technically viable alternatives:** The workshop is closed by synthesizing the set of techniques that have proven effective in controlling pests and diseases in olive groves without the need to apply aggressive agrochemicals (integrated pest management, authorized products in organic farming, trapping and sexual confusion, biological control, etcetera).

**KEEP** IN MIND

environmental challenges are not yet a key priority for many olive farmers. By limiting our speech to environmental risks and impacts, a significant proportion of olive grove farmers will not feel sufficiently stimulated. However, when we link together health and environment, most olive farmers will be willing to listen. When feeling their own health and that of their consummers is threatened, they will become more prone to embrace THAT... other (a priori less stimulating) strategies and farming practices, including environmentally oriented ones.





**SUSTAINOLIVE:** Novel approaches to promote the sustainability of olive cultivation in the Mediterranean. Research project 2019-2023

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