



IMPLEMET PROJECT SURVEY REPORT



SPAIN



Javier Morales & Manuel del Pino



Erasmus+



IMPLEMNT

INTEGRATED MANAGEMENT OF PESTICIDES AND LIABLE
EXPOSURE WITH MACHINERY EXECUTING NEEDED TREATMENTS

PROJECT NO: 2016-1-TR01-KA202-034059

FARMERS/STUDENTS TARGET GROUP



0.1 PERSONAL DATA

With regards to the description about farmers who have answered the questionnaire, we can draw the conclusion that the majority are male farmers, with the exception of the participation of two women farmers. In terms of the age of farmers, the majority are over fifty years of age or close to fifty. All have great experience as farmers, between 20 and 30 years of experience. We can also highlight the high level of studies of farmers; there are farmers with secondary school until farmer with degree or even with masters.

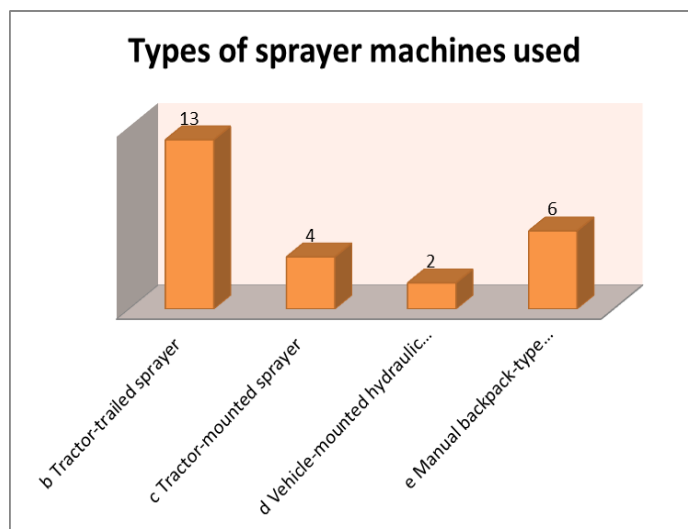
0.2 FARM DATA

The farms are very varied, mostly small and medium-sized farms. The majority of the farms are dedicated to permanent crops and annual crops. The number of workers employed goes from 1 to 10 workers. In terms of the type of contracts, there are permanent contracts but also temporary contracts.

1 USE OF SPRAYER MACHINES

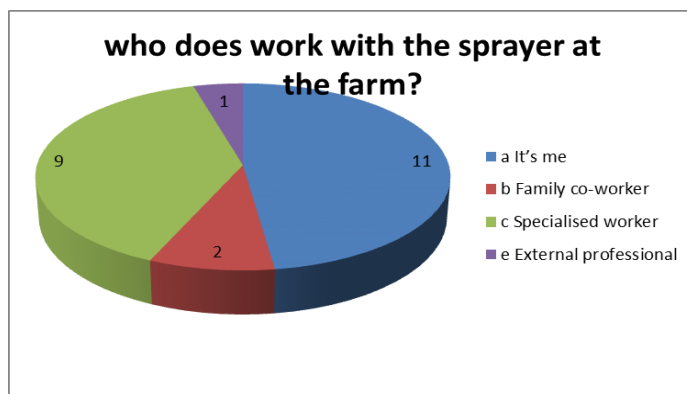
1.1 - Sprayer machines of new construction

From farmers' responses we can draw the following conclusion about the sprayer machines used. The sprayer machine most used is the tractor-trailed sprayer. Six of the fifteen farmers replied that also used the manual backpack- type. These are the two sprayer machines most used according to the farmers who filled out the questionnaire. We can also say that 9 out of 15 farmers are informed about Directive 2009/127/EC "essential health and safety requirements" while 6 of the 15 farmers say they are not informed about Directive 2009/127/EC.



Another important point is to know who uses the sprayer machines. With the result of the questionnaire we can draw the conclusion that most of the time the sprayers' machines are used by the farmers themselves or by specialised worker.

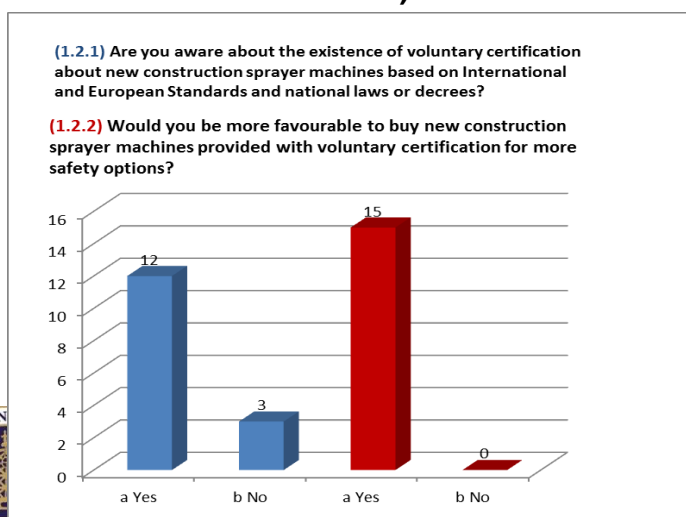
As the graphic representation collects, 11 participants in the questionnaire answered that themselves use the sprayers machines. Secondly, the sprayer also used by specialised worker as answered 9 participants.



1.2 – Voluntary certification (about sprayer machines of new construction)

All farmers participants in the questionnaires agree with buying new construction sprayer machines provided with voluntary certification for more safety options.

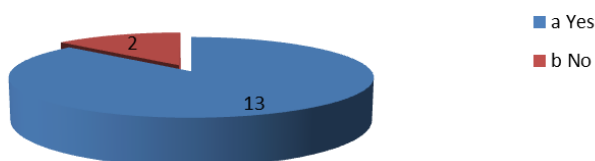
On the other hand, not all farmers are aware of the existence of voluntary certification about new sprayer machines. 12 farmers replied that they are aware of the existence of voluntary certification while three answered that they are not.



2 - Adjustment for safety aspects of sprayer machines in use

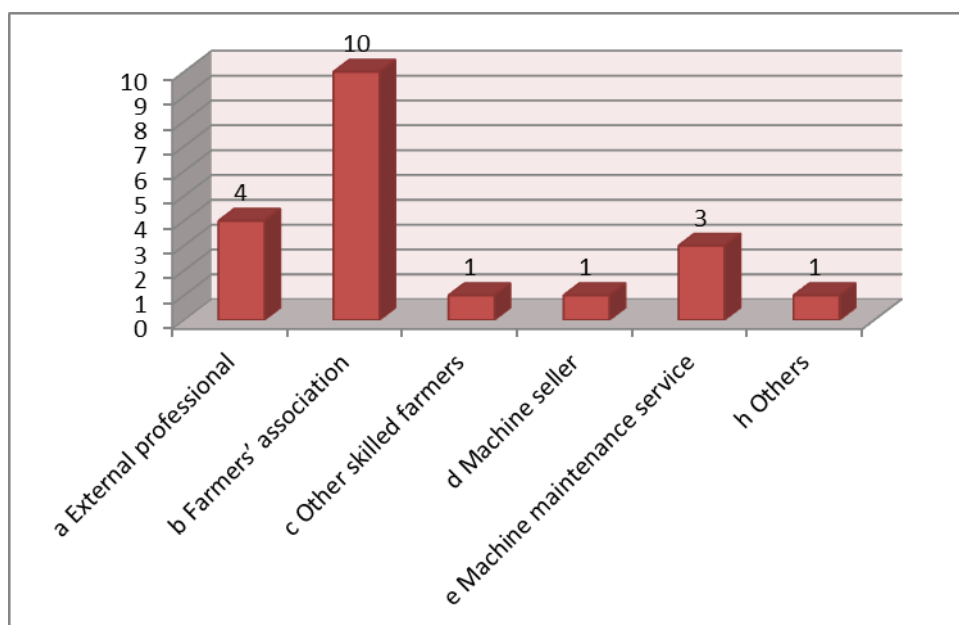
Is it mandatory to evaluate the safety aspects of a Sprayer Machines in use before new placing into the market?

Are you aware about importance and obligations to verify and adapt the sprayers in compliance with the existing standards if they don't fulfil the safety requirements in respect of the current regulations?



In the answers to this question we can see that the majority of farmers, exactly thirteen out of fifteen participants answered that they are aware about the importance to verify and adapt the sprayers in compliance with the existing standards.

The majority of farmers get advice, as an employer/farmer on risk assessment about compliance of their sprayers with the existing standard. Only two said they did not receive advice on risk assessment about compliance of their sprayers with the existing standard. The graphic shows who are the main advisers, farmers' associations being the main advisers, followed by external professionals



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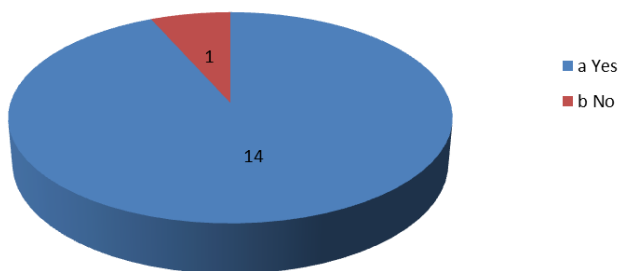
3 - Inspection of sprayer machines in use

Is there an inspection activity of sprayer machines in use in your country?

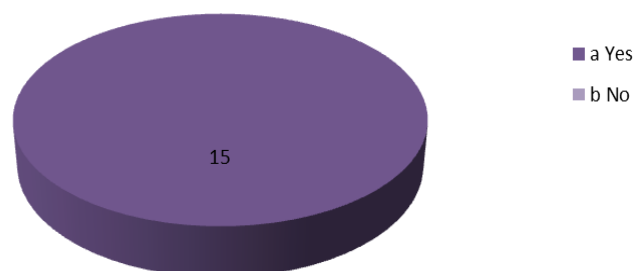
Farmers know it is very important a sustainable use of pesticides by reducing the risks and impacts of pesticide use on human health and the environment. They also know it is very important the use of alternative approaches or techniques such as non-chemical alternatives to pesticides.

All farmers agree on the important of training about how to use the pesticides in a safe and sustainable way.

Is it important, according to your opinion, an inspective control of the sprayers to grant a proper efficient use of any plant protection product?

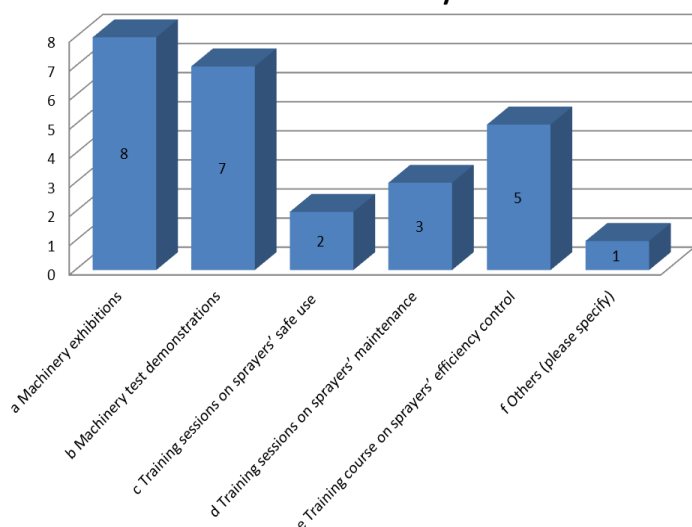


Is it useful, according to your opinion, a training specifically addressed to use in a safe and sustainable way the pesticides and control the efficiency of the sprayers

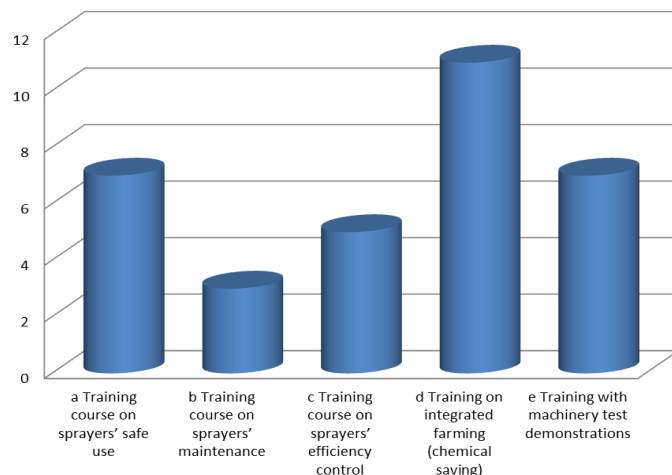


4 - Current training or information activity

what kind of activities do you attend?



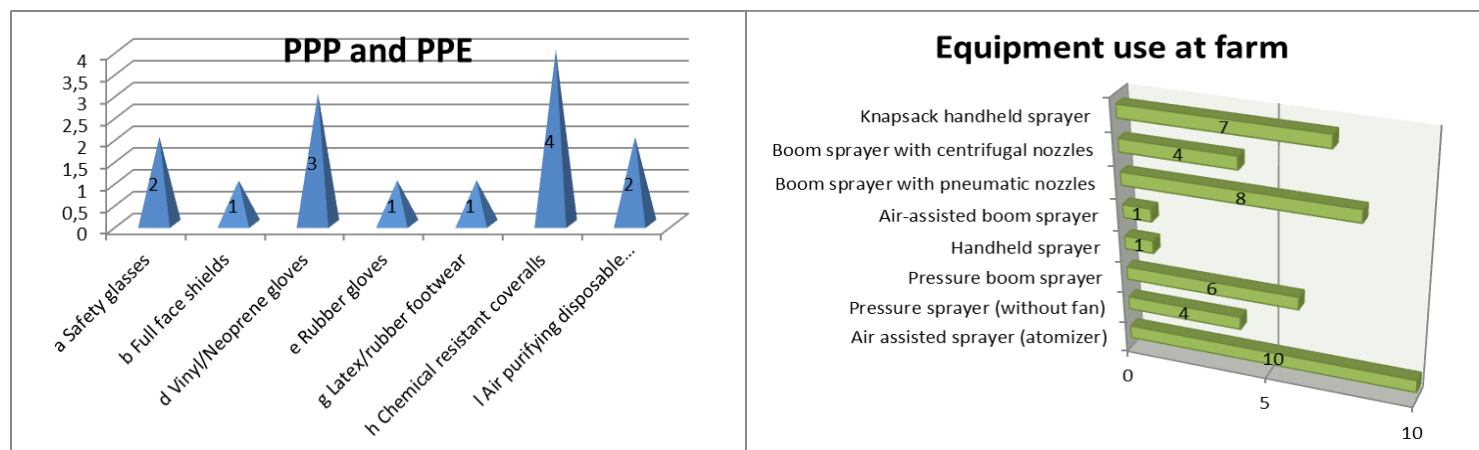
what kind of courses would you like to attend?



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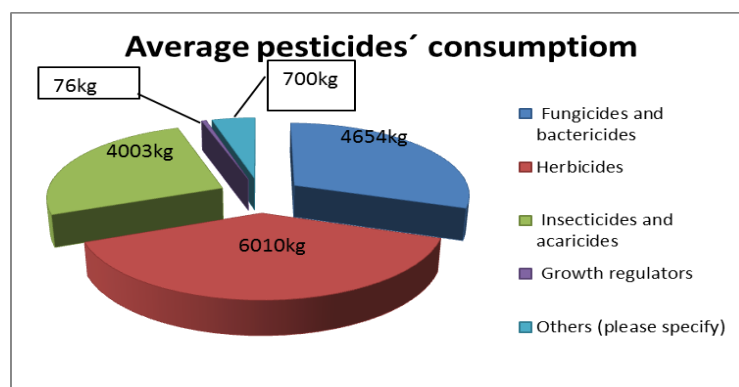
The information activities most attended by farmers as we can see in the graphic are machinery exhibitions and machinery test demonstrations. On the other hand, the farmers who participated in this questionnaire said that they are very interested in participating in training about integrated farming, also in training courses on sprayers' safe use and courses with machinery test demonstrations. These are the main training courses in which they would be interested in participating.

5 – Plant Protection Products (PPP) and typology of Pesticide Application Equipment (PAE)



In the first graphic we can see the personal protection equipment used in the application of pesticides, being the most used the chemical resistant coveralls and the vinyl/neoprene gloves.

The second graph refers to the equipment used at farms, being the most used air assisted sprayer, boom sprayer with pneumatic nozzles and knapsack handheld sprayer. In the following graphic we can see average pesticide consumed according to farmers who have answered. The most used are those belonging to the group of herbicides, following of fungicides and herbicides. Within the others, the farmers answered that they used also fertilizers.



Suggestions from the interviewees

No suggestions



TECHNICIANS/EXPERTS TARGET GROUP

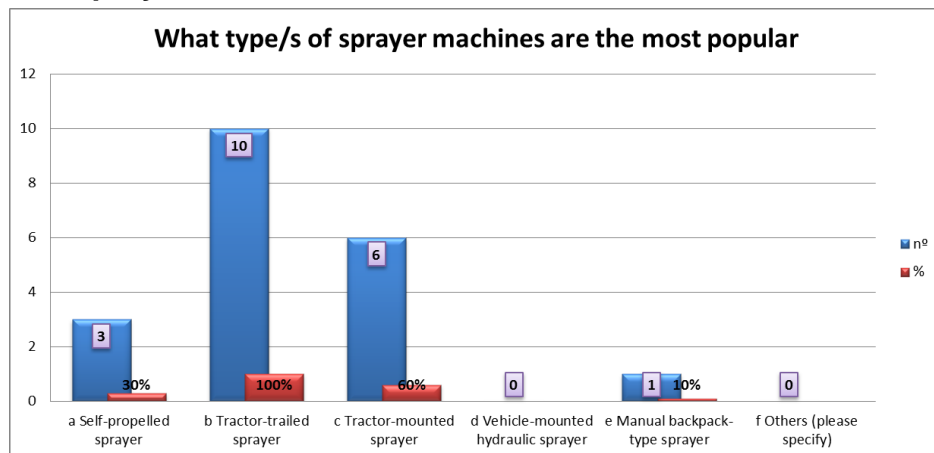


0.1 PERSONAL DATA

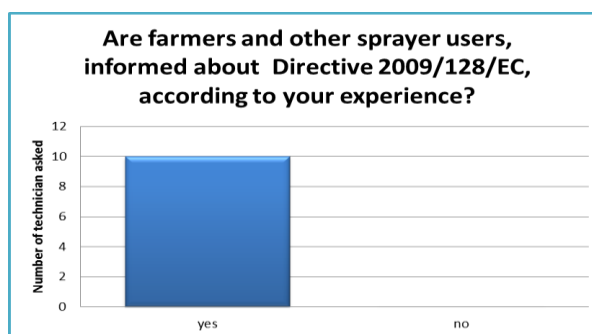
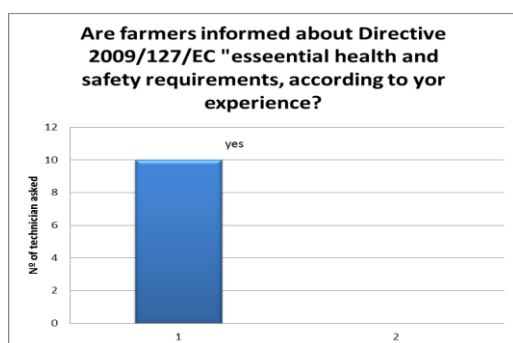
All the technicians who participated in the questionnaire are male, and we can differentiate two groups according to age and professional experience. On the one hand we have younger technicians and with a professional experience of about 10 years. On the other hand, we have a group of technicians older, in the fifties and with a greater professional experience, some with more than 30 years of professional experience. The majority are employees, and some of them are self-employer.

1 USE OF SPRAYER MACHINES

1.1 - Sprayer machines of new construction

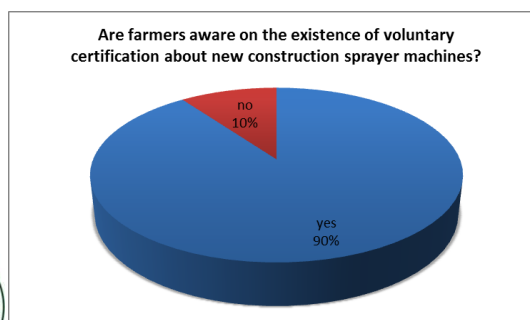
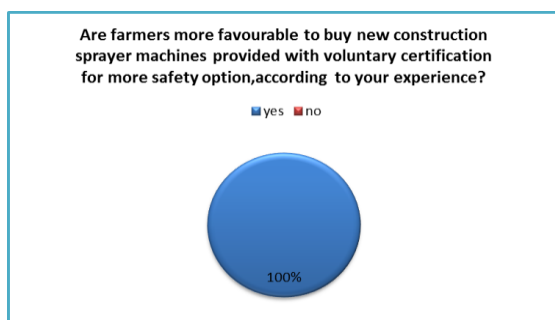


According to the result of the questionnaire the sprayer machines most popular is the tractor-trailed sprayer. Secondly, the technicians selected tractor-mounted sprayer as one of the most used (So believe 6 of out 10 technicians asked). Thirdly, self-propelled sprayer is another of the most used. Just one also selected the manual backpack- type sprayer.



The answer of the ten technicians to both questions were that YES. The farmers are aware that the use of pesticides has a threat to both human health and the environment. In their opinion the farmers know both Directives. Farmers are informed about essential health and safety requirements and also on sustainable use of pesticides and provided of functional control license. They know that the objective is to achieve a sustainable use of pesticides by reducing the risks and impacts of pesticide use on human health and the environment and promoting the use of integrated pest management and of alternative approaches or techniques, such as non-chemical alternatives to pesticides.

1.2 – Voluntary certification (about sprayer machines of new construction)



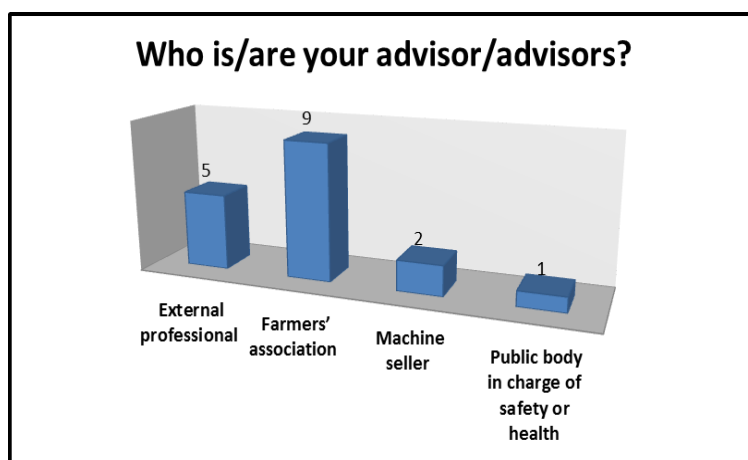
Only one out of ten consider that farmers are not aware of the existence of voluntary certification about new construction sprayer machines.

On the other hand the technicians consider that the farmers are in favor of buying new construction sprayer machines provided with voluntary certification for more safety option.

2 - Adjustment for safety aspects of sprayer machines in use

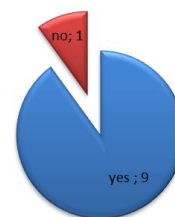
According to the experience of the technician, all agree that farmers are aware about importance and obligations to verify and adapt the sprayers in compliance with the existing standards if they don't fulfil the safety requirements in respect of the current regulations.

On the other hand, all the technicians answered that farmers get advice on risk assessment about compliance of their sprayers with the existing standards. According to the opinion of the technician and how we can see in the graphic, farmers' association and external professional are the main advisers.



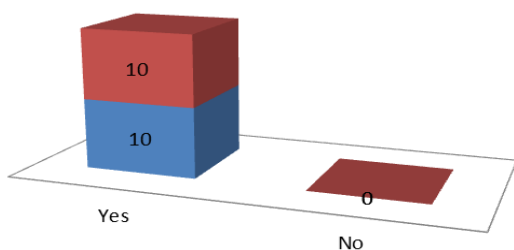
3 - Inspection of sprayer machines in use

Are farmers aware about importance to achieve a sustainable use of pesticides by reducing the risks and impacts of pesticide use on human health and the environment and promoting the use of Integrated Pest Management and of alternative approaches or techniques such as non-chemical alternatives to pesticides?



■ Is it useful, according to your opinion, a training specifically addressed to use in a safe and sustainable way the pesticides and control the efficiency of the sprayers?

■ Is it important, according to your opinion, an inspective control of the sprayers to grant a proper efficient use of any plant protection product?

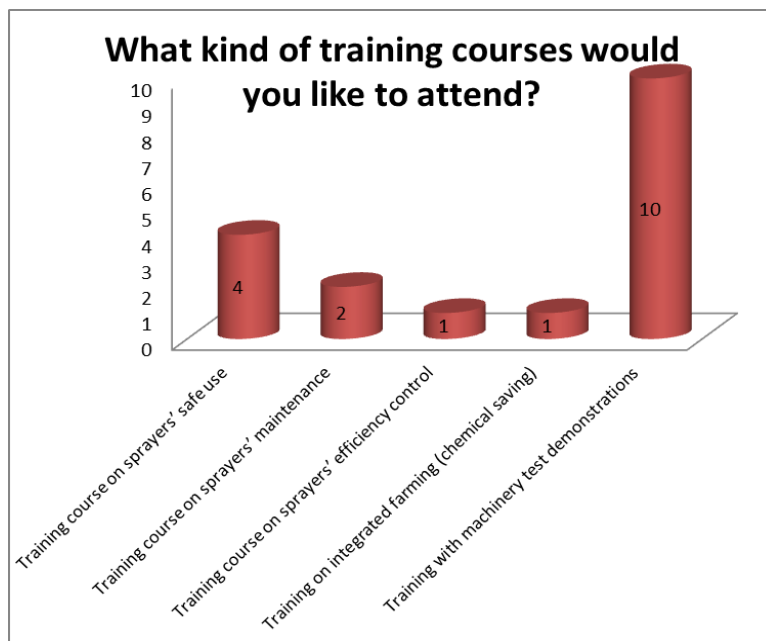


According to the answered of technicians, the farmers consider very important a training focused in a safe and a sustainable use of the sprayers and pesticides. It is very important to know how to use these sprayers correctly. The technician also consider that is important to the farmers an inspective control of the sprayers to avoid the use of defective sprayers that produce risks and impacts on human health and the environment

4 - Current training or information activity

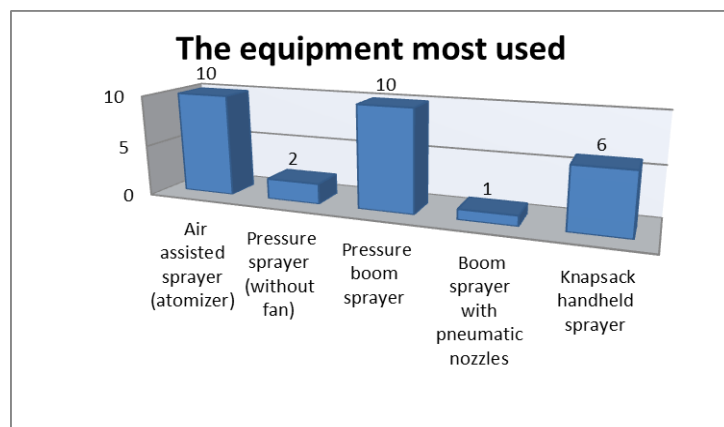
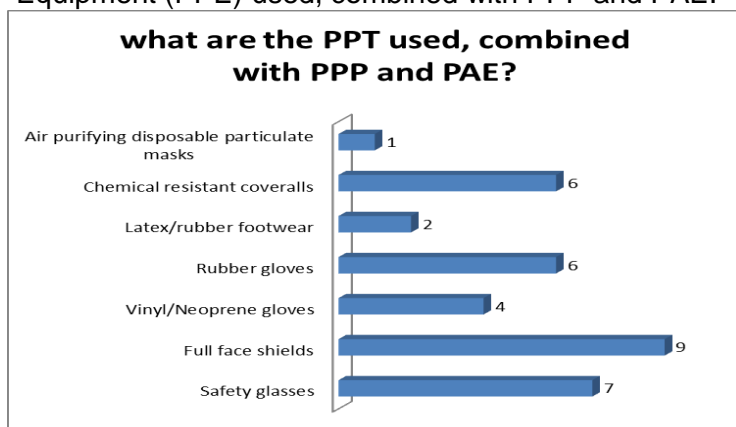
According to the technicians there are in Spain training and information activities on safe use, maintenance and control of the sprayers. In the following graphic we can see the different courses and training more requested by farmers according to the technicians

The course most requested by farmers is training test demonstrations. Another of the courses most requested according to the technician is training on sprayers' safe use.



5 – Plant Protection Products (PPP) and typology of Pesticide Application Equipment (PAE)

According to the technicians and how we can see in the graphic, these are the Personal Protective Equipment (PPE) used, combined with PPP and PAE.



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In terms of the most used equipment and according to the opinion of the technicians, air assisted sprayer and pressure boom sprayer are the equipment most used followed by knapsack handheld sprayer.

Suggestions from the interviewees

There were not any suggestions from the interviewees

CONCLUSIONS

Of the results of the questionnaire we can draw the conclusion; the farmers in Spain know that the use of pesticides is recognised as posing threats both to human health and the environment. The farmers know that is very important to reduce the risks to human health and the environment resulting from the use of pesticides. For this reason they are aware that the construction and maintenance of machinery for pesticide application play a significant role in reducing the adverse effects of pesticides on human health and the environment. They are also aware that it is essential to know how to use correctly, for this in Spain is obligatory to receive training on the use and application of to pesticides which are plant protection products. This training it also includes the essential health and safety requirements in the use of pesticides.

The majority of participants are informed about sustainable use of pesticides and provided of functional control license.

The farmers in Spain are becoming increasingly aware of the need to use of alternative approaches or techniques such as non-chemical alternatives to pesticides. Using non chemical alternatives eliminate the risk.

We can say to finalize that in Spain the farmers are aware of the importance of reducing the risks in the application of pesticides, also in training on the correct use of pesticides as well as the importance of the proper functioning of the machines used.