

## Training as key factor to improve Pesticide Application Process. Syngenta-UPC agreement: successful example in Spain

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Badly maintained spraying equipment and poor knowledge and calibration practices are major reasons for unintended plant protection products (PPP) losses or overuses. These losses may lead to the pollution of soil and water, increase the unnecessary operational cost and reduce the whole benefits for farmers. In order to avoid all these problems, a large official measures have been officially addressed in the EU Directive for a Sustainable Use of Pesticides (128/2009/CE). Among of these measures, an obligatory training program of all involved agents has been enforced aiming at reducing risks derived from pesticide use. This paper presents the encouraging results obtained after three years of training and informative actions in Spain. The project has been developed under the official agreement between Syngenta Iberia, S.A. and Universitat Politecnica de Catalunya (<http://catedrasyngenta.upc.edu> ). More than 1500 technicians, farmers and advisors have been trained in all aspects concerning the spray application process. Results demonstrated the importance and great influence of training, more than punishments and official regulations. Training activities have been arranged starting on the explanation of legislative situation in Europe, allowing identifying problems due to high level of ignorance concerning the legislative frame. Nozzle technology, calibration process and methods to establish the most accurate volume rate according canopy characteristics have been also important activities. Finally, best management practices, mainly for drift reduction purposes, have been addressed. In general, trained attendants have shown their interest in the courses, have modified their habits in working parameters and, in global, a considerable reduction of applied volumes and pesticide amount have been achieved. Training activities have been very well appreciated for all the attendants.

