TOPPS – EU Academy

Intensive Expert Course on water protection

- Why was the course created?
- What is it?
- What do we hope to achieve?

TOPPS stakeholder workshop
Nov 14th 2018 Brussels
Stuart Rutherford
ECPA
Legal Framework for crop protection increasingly focuses on the **Crop Protection Process** for risk reduction.

- **Sustainable use of Pesticides (SUD)** Directive EC/1107/2009
- **Water Framework** Directive 2000/60/EC Water protection / improvements
- **Machinery Directive + Amendment** 2009/127/EC requirements for application machines

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**PPP - properties**  
**Use phase**
RUNOFF MITIGATION STARTS IN THE FIELD

Learning more about risk reduction potential across the whole CROP PROTECTION PROCESS is necessary for a holistic approach to:

- RISK EVALUATIONS
- ADVICE
- PESTICIDE USE
INCORRECT ADJUSTMENT OF SPRAYERS IS THE BIGGEST DRIFT RISK

Trials in Italy show that just by correctly adjusting the sprayer can:

reduce spray drift by up to 75%

Examples: Applications with incorrectly adjusted vertical profiles and air flow rate
Majority of stakeholders perceive insufficient advice for farmers on adjusting their sprayers

... if a trainer is not familiar with a subject they are not likely to talk about it with farmers...

Training is also needed for policy-makers/officials responsible for decisions relevant for agriculture and farmers

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Note +/- 80% of respondents indicated contacts with farmers at least once per month

Do farmers get sufficient advice on adjusting sprayers? Evaluation based on main professional background (%) (Sample n= 1161 ; survey from 2016)
TOPPS – Academy ...

Offers an intensive course on water protection in THEORY and PRACTICE covering all main entry routes of PPP to water

- Two courses at the University of Turin already conducted 2016 and 2018; next course planned in 2020

- Courses are given by TOPPS partners and experts: half the time is devoted to practical demonstrations and exercises

- Course is for free and open for participants from all EU countries

- Participants only pay their travel and accommodation cost; course including travel takes one full week
TOPPS Academy course programme overview

Programme 1st day:

**Diagnosis and mitigation measures to reduce POINT SOURCES**
(half day theory/half day practice)

- Sprayer cleaning (e.g. continuous cleaning)
- Sprayer filling (e.g. closed transfer systems)
- Remnant Management (Treatment options)
- Operation of sprayers (field, bush, & tree crop sprayers)
- Operator protection
TOPPS Academy course programme overview

Programme 2nd day:

**Diagnosis and mitigation measures to reduce SPRAY DRIFT**
(half day theory/half day practice)

- Nozzle / pressure and droplet size
- Drift reducing technology
- Drift risk evaluation tool
- Field vs bush & tree crop sprayers
- Sprayer adjustment
Programme 3rd day:

Diagnosis and mitigation measures to reduce RUNOFF / EROSION / DRAINAGE/ LEACHING (half day theory/half day practice)

• Soil texture / infiltration
• Soil compaction
• Soil maps / risk evaluation
• Mitigation measures
• Vegetative filter strips
• Lysimeter studies
What do we want to achieve?

• Increase awareness of potential for better water protection through: BMPs, improved sprayers, and infrastructure

• Support and stimulate ideas to improve water protection training and education at local level

• Help better integrate water protection BMPs in official trainings:
  ➢ Practical demonstration is key
  ➢ Water/ application issues are high priority, but in practice often secondary to IPM and regulatory?

• Transfer sufficient knowledge on water protection to make participants confident to talk about learnings with colleagues and farmers

• Help to create an EU-wide network of experts for water protection in agriculture
High interest exists among stakeholders in a Water Protection Course

Results from Stakeholder Survey 2016, n=1161

On average 77% of the respondents indicate a high interest

But....
Interest in course participation drops when a contribution for travel and accommodation is asked for.
Next invitation to stakeholders for a TOPPS academy course on water protection will be in 2020

Better knowledge of the use phase of PPPs will help further reduce water contamination

We are convinced that investment in training and education is time and money well spent!

Thanks for your attention