



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
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ECPA

Legal Framework for crop protection increasingly focuses on the **Crop Protection Process** for risk reduction

PPP – registration
Directive
EC/1107/2009
Access to Market

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

PPP - properties

Use phase

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

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

<i>Background</i>	<i>Yes</i>	<i>No</i>	<i>Don't know</i>	<i>n</i>
Control/Monitor	37	50	12	220
Farm advice	35	54	11	393
Stewardship	34	56	9	64
Application tech	32	61	7	69
Water quality	19	31	50	32
Education	18	73	9	44
Regulation	15	65	20	60

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



TOPPS – Academy ...



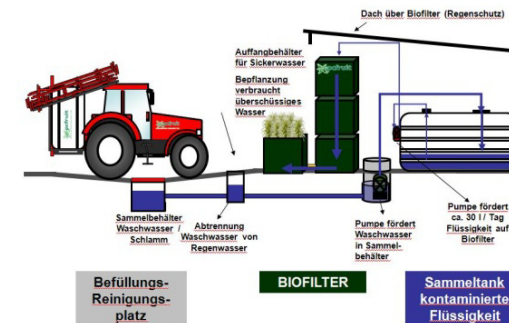
Offers an intensive course on water protection in THEORY and PRACTICE covering all main entry routes of PPP to water

- 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

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



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

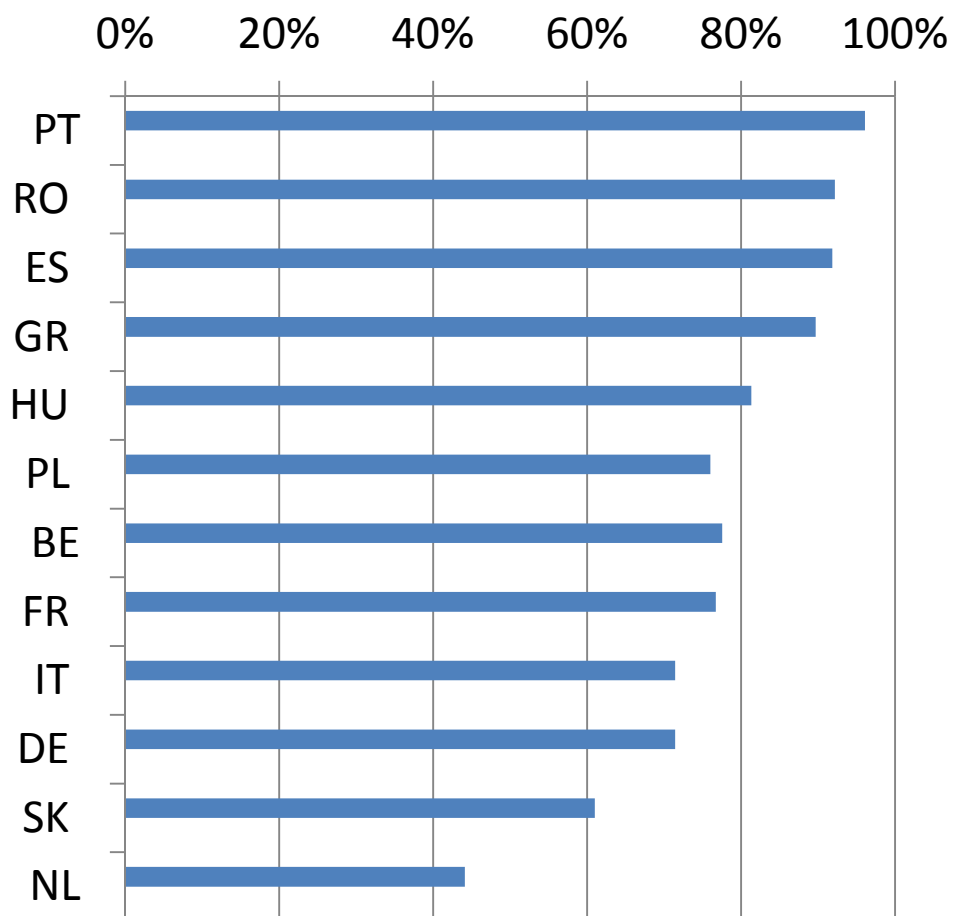


High interest exists among stakeholders in a **Water Protection Course**

Results from Stakeholder
Survey 2016, n=1161

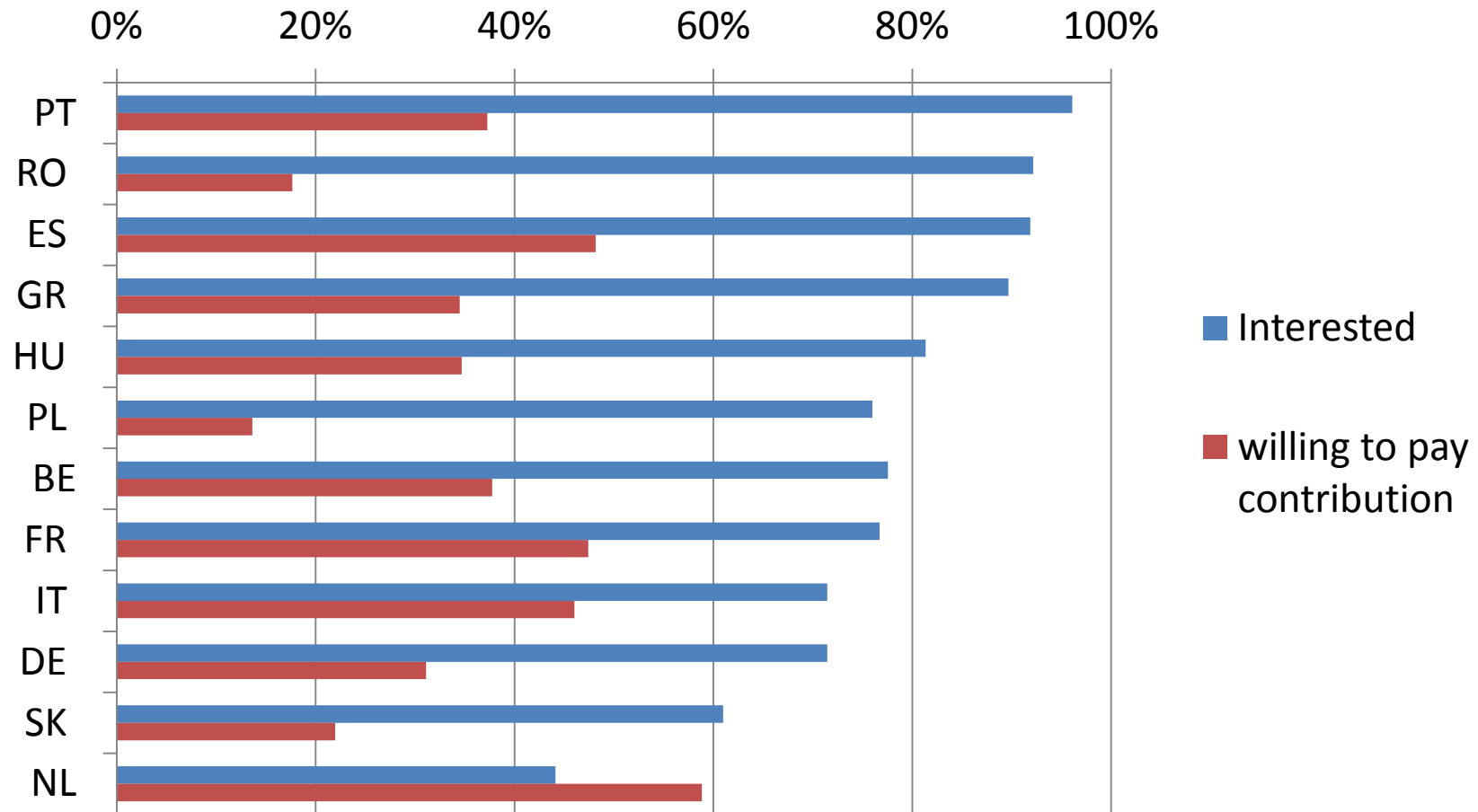
On average 77 % of the
respondents indicate a
high interest

But....





Interest in course participation drops when a contribution for travel and accomodation 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