



# CropLife EUROPE

## Developments and Technical Progress on Risk Mitigation Measures – an update

March 2021

Anne Alix, Sarah Adham, Bernhard Gottesbueren, Neil Greener,  
Neil Mackay, Julien Durand-Réville & Robin Sur

# Status of Risk Mitigation Measures for Crop Protection Products



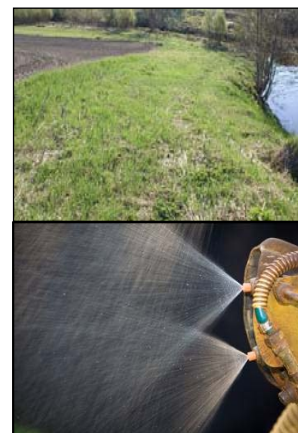
- **MAGPIE multi-stakeholder initiative to inventory environmental risk mitigation measures (RMM) (2016). Since then:**
  - Development and implementation of new RMMs in Member States
  - Workshop on Spray drift: DRAW (<https://www.spraydriftmitigation.info/>)
  - Innovation in Precision Applications and application machinery
  - Innovation and uptake of RMM options for human protection
- **Triggers an update of the toolbox, alignment for consistency and communication to facilitate uptake**
- **Calls for recognition in the decision making process and the risk assessment, as this will also encourage implementation**

<https://www.setac.org/magpie>

# Update of RMMs in MSs and new National guidance documents



- MAgPIE (2016): 70+ RMM across EU 28
- Further updates shared during Commission workshop in January 2020
- New Guidance document
  - Example of Italy: [link](#)
  - Preliminary risk assessment and determination of % reduction needed
  - Set of measures adapted to crop types (arable crops, vineyards, tree crops)
  - Combination of measures



# Developments in some areas

## e.g. Spray drift: the DRAW workshop

<https://www.spraydriftmitigation.info/>



- Discussions on databases & recommendations to measure spray drift
- Technology inventories
- Best management practice awareness-raising campaigns
- User-directed tools to support customised assessments
- Development of web platform:
  - Link to Guidance Documents and Policy;
  - Drift representation risk assessment
  - TOPPS
  - Tools (background, how they work, efficacy)
  - Certification: Testing and efficacy



# Innovation in Precision Applications and application machinery



**Contribute to reducing application volumes and off-crop transfers:**

## **Targeted applications**

- Spot applications to control weeds and bushes
- Localised applications

## **Modern application machinery**

- Drone applications (Expert discussions initiated in EU, OECD, and other global regions)
- Modern sprayers can perform highly targeted applications
- Enforcement, track and trace application modalities (location, volumes, timing)
- Modernisation of drillers

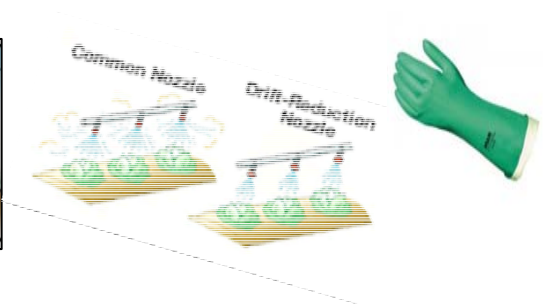
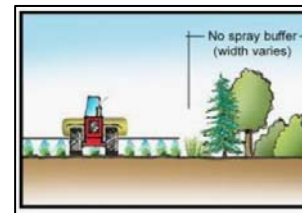
## **GIS assisted applications**

- Support in vulnerable areas

# Measures to Mitigate Human Exposure: ready for an update



- Limited number of options
- Variable acceptability across the EU
- Few guidance documents clarifying their status (e.g. Norther Zone)



- Bystander and resident:
  - inconsistency in acceptability of same mitigation options considered appropriate for off-target environmental exposure but not for mitigating human exposure

**Table 17.2.6-1** NZ approach<sup>s</sup> of choosing PPE and other risk mitigating measures in the EFSA calculator

	DK	NO	SE	FI	LT	LV	EE	Harmonized
<b>Operator</b>								
Tiered approach	Y	Y	Y	Y	Y	Y	Y	Y
Workwear (mix/load+appl) +								
1. No PPE								
2. Gloves mix/load								
3. Gloves mix/load + appl								
RPE	Y	Y	Y	Y	Y	Y	Y	Y
Head covered	Y	Y	Y	Y	Y	Y	Y	Y
Closed cab	Y	N	Y	N	Y	Y	Y	N
Drift reducing equipment	Y	N*	Y	Y	Y	Y**	N	N
<b>Residents/ bystanders</b>								
Buffer strip	Y	N*	Y	N	Y	Y	Y	N
Drift reducing equipment	Y	N*	Y	Y	Y	Y	N	N
Both buffer strip + drift red.	Y	N*	Y	N	Y	Y**	N	N



# Occupational exposure: areas for further development (Operator & Re-entry worker)



## Opportunity to update the current risk assessment:

- PPE assumptions made in the EFSA OPEX Guidance (2014) are outdated.
- Evolution of certification for protective clothing and gloves, particularly where high quality information is available for certified materials.
- Initiatives in France and Germany to accept working gloves for re-entry workers and implementation of certification process.
  - Ex in the new BVL guidance: *Partially coated protective gloves for follow-up activities in treated crops with (partially) dried residues; certified with the new ISO 18889*
- Re-entry worker data now available with gloves for various re-entry tasks in grapes.



## Allow calculation of re-entry intervals in the model.

## Allow operator exposure data on Closed Transfer Systems

- Based on data being generated to demonstrate their effectiveness in reducing exposure during mixing/loading.



lse---

# Non-occupational exposure: areas for further development (Bystander & Resident)



- **Mitigation options are limited to buffer zones (5 and 10m) and /or drift reduction nozzles (maximum 50%).**
- **An improved model for the prediction of drift to bystanders is available**
  - which has been developed further to include 50%, 75% and 90% drift reduction data (BREAM2 V2). This tool can already be used for the mitigation of exposure to bystanders and residents.
- **MAGPIE identified 70+ risk mitigation measures.**
  - We need to understand the regulatory acceptability of some of these measures for mitigating human exposure.
- **Gathering supportive data** on the availability and actual use of Risk Mitigation Measures as well as on the hurdles which may prevent their uptake is essential. CropLife Europe is committed to playing its part !
  - This data could facilitate and significantly increase the confidence in regulatory acceptance of RMMs.



# Updating the RMM toolbox is needed



## Update of the inventories in MAgPIE, with:

- Risk mitigation measures in place
- Developments in application technologies
- Identify modern technologies for which uptake should be increased
- Protection goals / reduction targets achieved

## Update of Focus Landscape and Mitigation:

- To take technical progress and Risk Reduction Factors of RMM into account in the risk assessment
- Update risk assessment tools
- Include human exposure mitigation

Member State	Maximum No Spray Buffer Zone	Drift Reducing Nozzles
Bulgaria	100 m	SDRT proposals accepted <sup>C</sup>
Croatia	20 m	No precedent for acceptance
Cyprus <sup>A</sup>	20 m	SDRT proposals accepted <sup>C</sup>
France	20 m	Used at discretion of farmers – cannot be introduced as label requirement
Greece	20 m	SDRT proposals accepted <sup>C</sup>
Italy	30 m	50%, 75%, 90%, 95%, 99%
Malta <sup>B</sup>	20 m	50%, 75%, 90%, 95%, 99%
Portugal	20 m	SDRT proposals accepted <sup>C</sup>
Spain	50 m	50%, 75%, 90%, 95%



# Regulatory acceptance of the toolbox is needed

- Regulatory acceptance of classical and digital risk mitigation toolbox is critical to ensure uptake and recognition by the society



# Conclusions



- **Range of Risk Mitigation Measures available**
- **Significant progress in application technology and digital sciences since MAgPIE**
  - Update of the inventory ongoing, to facilitate implementation, communication and regulatory process
  - Links to risk assessment guidance documents
  - Ensure consistency across human and environmental risk assessments
- **Acceptance of RMM in the decision making process and risk assessment is needed to accelerate uptake and recognition by the society**
- **Feeds into the Green Deal and objectives of Risk Reduction**



**Thank you**

