

# 5-Point Programme for Sustainable Plant Protection



## 1. Minimise pesticide use

### Why

- Simply because their toxicity is not restricted to the pest
- Remember the evidence of environmental harm from past (“Silent spring”) to present (e.g. neonicotinoids)
- Prospective risk assessment is generally limited due to the complex and historical nature of ecosystems and does actually ignore the overall PPP load per year
- no use = no exposure = no risk

### How

- Uncover and enforce the original idea of Integrated Pest Management (IPM), i.e. include an order for strict minimization of pesticide use in IPM principles
- Boost organic farming as a low pesticide input production system by agricultural policy
- Provide more industry-independent plant protection advisory services for farmers (IPM and organic)



## 2. Identify, quantify and communicate risks

### Why

- Because chemical plant protection is a risk technology
- Integration of scientific progress in risk assessment is mandatory, especially for “known unknowns” (e.g. wild pollinators, amphibians, indirect effects on biodiversity)
- Consider potential drawbacks of excessive complexity in higher tier risk assessment for individual PPP (protectivness, labour and costs, involvement and transparency)

### How

- Restrict complexity of (higher tier) risk assessment, e.g. by hazard-based decision making (cut-off-criteria) or by priority to risk management over risk refinement
- Make publicly available and thus open to verification the information used in risk assessment
- Conduct research (e.g. develop risk indicators for overall pesticide intensity, field-monitoring of fate and effects)



## 3. Optimise risk management

### Why

- Application is directly into the environment
- Immission / fate of pesticides and their residues into natural habitats adjacent to the field and into surface and ground water should be reduced as far as possible
- Ambitious risk management by technical (e.g. drift-reducing nozzles for spray application) and landscape measures (e.g. buffer strips) is reasonable

### How

- Restrict pesticide application in sensible areas (drinking water reserves, nature reserves, public gardens)
- Enforce the public control system for compliance with legally binding PPP-specific risk mitigation obligations and train farmers efficiently in risk management
- Promote establishment of permanent vegetated buffer strips along surface waters and sensible areas (e.g. woods)



## 4. Compensate inevitable ecological effects

### Why

- Pesticides are one relevant factor for the current decline of biodiversity in landscapes with intensive agriculture
- Indirect effects on birds and mammals result from the depletion of food resources in pesticide treated fields (herbicides reduce weed = plant food, insecticides reduce arthropods = animal food)
- The “Ecological Focus Areas” required by EU Common Agricultural Policy (CAP) are not sufficient

### How

- Requirement for ecological “compensation” areas (fallow land, flower strips) not treated with PPPs at farm level
- Thereby (i) mitigate inevitable indirect effects, (ii) increase ecological resilience of agro-ecosystems and (iii) enable the authorisation of biodiversity-affecting PPP
- A robust risk-based PPP-specific decision making approach has to be agreed and established within the EU



## 5. Internalise external costs

### Why

- Relevant costs resulting from pesticide use are not included in prices of crops and foodstuff
- External costs paid by the public today (indirectly via e.g. general taxes) or in the future are e.g. residue monitoring (water, food-stuff), clean-up of drinking water, human health effects, effects on biodiversity and ecosystem services (e.g. pollination, natural pest control)

### How

- Conduct comprehensive socio-economic analyses in order to provide quantitative data for an informed public discussion on benefits, risk and costs of current PPP use
- Accelerate research on methodologies to translate environmental effects into economic dimension
- Start an informed discussion on the type, need and effectiveness of options for internalisation (e.g. PPP tax)

#### Contact:

Umweltbundesamt, Postfach 14 06, 06813 Dessau-Roßlau

joern.wogram@uba.de, [www.umweltbundesamt.de](http://www.umweltbundesamt.de)

[f](https://www.facebook.com/umweltbundesamt)/umweltbundesamt.de, [t](https://www.twitter.com/umweltbundesamt)/umweltbundesamt, [y](https://www.youtube.com/umweltbundesamt)/umweltbundesamt, [i](https://www.instagram.com/umweltbundesamt)/umweltbundesamt

Jörn Wogram, Head of Section IV 1.3 Plant Protection Products

German Environment Agency

**Umwelt  
Bundesamt**

