

Development and validation of methods for the estimation of spray drift deposition on surface water

Theme: Risk assessment procedures for registration of plant protection products BO-06-010-003

Problem

Risk assessment methodologies are to be developed, validated, reviewed or improved for the protection goal: risk to aquatic organisms. A major input route for the risk to aquatic organisms is spray drift. Differences in spray drift data and the risk to the surface water do occur between countries.

Approach

The research objective is to develop a probabilistic methodology to evaluate spray drift risk at different surface water bodies; furthermore to harmonize information on drift deposition by analyzing spray drift data and identifying the main differences.

- A higher tier approach for aquatic risk assessment
- The results from spray drift field measurements are collected in a spray drift database to come to generalized spray drift curves
- International spray drift data are collected and compared with the Dutch spray drift data to identify sources of differences (international working groups, ISO)



Results

- Outlines of a probabilistic methodology to evaluate spray drift risk at different surface water bodies are developed and discussed
- New Dutch standard spray drift deposition curves in fruit crop and arable crop spraying are presented
- Analyses of the exchangeability of drift reducing technology on spray drift deposition between EU member states

Future use in risk assessment

The results can be directly used for the development of a higher tier approach for aquatic risk assessment in the registration procedure for crop protection products.

Jan Huijsmans, Jan van de Zande & Henk Jan Holterman

Contact: Jan Huijsmans
Plant Research International
P.O. Box 16, 6700 AA Wageningen, the Netherlands
T +31 317 48 06 85 - F +31 317 48 10 47
jan.huijsmans@wur.nl - www.pri.wur.nl