15 years of sprayer inspections in the Netherlands: Benefits for farmers and society

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In 1997 sprayer inspections were first introduced in the Netherlands by the Product Board for Arable Farming and the Product Board for Horticulture. Farmers and growers at the time realized that careful use of agrochemicals was a prerequisite for maintaining support by regulators and society benefiting both spraying results and the environment. Next to sprayer inspections also spraying licenses were introduced at that time. In the beginning all sprayers were inspected every two years. Since there had not been a testing program before lots of old sprayers where updated or replaced in the early years upgrading the level of spraying significantly.

Later on the frequency of testing was changed to once every three years. Over the years sprayers evolved and spraying practices evolved: low dosage systems became common practice, low drift nozzles were introduced and more recently GPS is used to support spraying. Next to the technical spraying results and the effect on the environment, especially avoiding spray drift toward waterways, management of residuals on crops (MRLs) has become an important issue in crop protection. This requires sprayers that are in optimal condition especially the optimal distribution of chemicals on crops is essential to avoid MRL exceedences. For a grower checking the distribution features requires specialized equipment that is offered as part of the sprayer testing program. Among other features such as checking the construction and determining the pump capacity this is a highly valued part of the test program.

So whereas in the beginning support from government and society were the reasons for starting sprayer inspections nowadays market demands and certification schemes have become more and more important for testing sprayers.

Introduction

- Crop farmer in the Netherlands: potatoes (french fries), cereals, maize, (flower bulbs)
- Spraying approx 600 ha’s per year; own farm and contract spraying: mainly grassland and maize
- Policy advisor crop protection at LTO Nederland
- Vice-chair Copa-Cogeca Working Party fytosanitary questions
History of sprayer inspections in NL

- “Mandatory” introduction in 1997
- Farmer initiative
- Responsible use of ppp’s was needed to tackle criticism from regulators and society
  - Spraying licenses
  - Sprayer inspections
- Set up of an independent institute responsible for sprayer inspections (SKL)

History of sprayer inspections in NL

Begin period:
- Sprayers tested every two years
- Many old sprayers updated or replaced
- Upgrading quality of spraying equipment

Later on:
- Sprayers tested every three years
Farmer experience

- Sprayer inspection is a valued part of machine maintenance, important aspects:
  - nozzle testing: distribution of chemicals
  - rearing capacity
  - construction and safety aspects
- Testing is done:
  - At acceptable costs (approx 200 euro)
  - In short time (approx 1 hour excluding necessary repairs)
  - at nearby location (machinery dealer)

Farmer benefits

- Up to date equipment in good condition
  - Importance of good chemical distribution features (MRL setting, spraying results)
  - Avoiding environmental risks such as leakage and spray drift
  - Compliant with regulations and certificates (Global Gap etc)
Benefits to society

- Reduction of environmental risks
  - Waterways
  - Ground water
  - Non target plants and insects (bees!)
  - Food safety

- Reduction of risks to residents and bystanders
Future outlook

• New sustainable use directive
  - All spraying equipment to be tested including e.g. in glasshouses
• Increasing demands from buyer’s and consumers
• Technical complexity of sprayers increases: GPS, low drift features etc.

Sprayer testing remains essential part of farmer’s licence to produce!