

Pesticides in Water

We are all becoming much more aware of the pending Water Framework Directive that will address water pollution.

The main goal of the Environment Agency in implementing the legislation will be to ensure that all waters (surface and ground waters) will be in a good clean condition by 2015. It is now possible to detect pesticides in water at very low concentrations (1 part per billion) and it is therefore crucial that everyone engaged in using pesticides must recognise the implications of inappropriate handling and application. Fully trained and competent spray operators know the damage a discarded foil could have on the environment if it found its way into a local watercourse. We also have various types of equipment such as shrouded booms and low drift nozzles; new packaging such as the S pac from Syngenta (minus those foils) and best practice guidelines such as the LERAP, to help eliminate the potential of pesticide spray inadvertently ending up in watercourses.

However, recent information published in the April –edition of British Wildlife magazine identifies a number of

pesticides that are still regularly found in waterbodies. These include clopyralid (used to control grassland weeds) mataldehyde (active ingredient in slug pellets) and IPU (now banned and should not be found a year after its withdrawal). In discussions with Dr Ruth Mann, Head of Turfgrass Protection at STRI, it is clear that chemicals used on a regular basis by groundsmen and greenkeepers, are also consistently being found. Chemicals like 2,4-d at 5ppm, mecoprop at 11ppm, Diuron at 10ppm, and simazine at 5ppm (figures based on average levels measured annually between 1998 and 2007). The Environment Agency has recently found 19 different chemicals (different active ingredients) at undesirable levels and this rings alarm bells to the effect that if this continues then more of the chemicals we use as part of daily working could be banned or their use restricted in the future. Moreover many of these chemicals cannot be removed through water treatment and much more emphasis needs to be given to controlling these chemicals at the source (source control).

The Environment Agency is concerned that the cocktails of pesticides being



detected are having damaging effects on aquatic flora and wildlife, with cause and effect being difficult to determine.

In writing this it does strike home to me that the untrained public are as much and probably more to blame for many of the chemicals being detected in our water courses. Although you may feel that this is outside your control, it would be worth while ensuring that the right advice is given to all of our neighbours, on a Sunday morning when their contemplating a path clearing exercise, or an additional round of slug control. Their actions like those of the untrained professionals will ultimately come back to affect us all over the course of the next few years.

For further info. please email Dr Ruth Mann at STRI - ruth.mann@stri.co.uk

Turf disease protection that

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