



ON COURSE FOR SAFETY

Nia Frost looks at the improvements in chemical safety on the golf course

Has chemical safety on the golf course improved in recent years? The answer is, without a doubt, yes. For many years chemicals have been used without adequate information about their hazardous properties or what risks are involved in their short- and long-term use. But that is not the case now that improved information about chemicals creates greater transparency and helps identify chemicals of concern.

The EU Review of control products is probably the single most influential factor affecting the access to control product for turf and amenity managers. The review is actually officially known as – EC Directive 91/414/EEC and its aim is to ensure that all pesticides on the market before 1991 meet present day safety standards.

The review has been initiated to:

- Harmonise national arrangements for authorisation of PPP within EU.
- Ensure that all countries operate to a high standard be implemented in UK by Plant Protection Product Regulations (PPPR) 1995.
- Use European data for national registrations.

The management and maintenance of golf courses relies on a wide range of tasks, each of which may present associated hazards or risks to the health, safety or welfare of employees and visitors.

The HSE (Health & Safety Executive) has published guidance on this subject in 'Health and Safety in Golf Course Management and Maintenance' (HS(G)79. This involves setting a clear health and safety policy; risk assessment and control; training; monitoring and review of working practices; effective communication; accident recording, reporting and investigation.

Certain hazardous substances used on golf courses (e.g. pesticides) may require an assessment of risks under the Control of Substances Hazardous to Health Regulations 1999 (COSHH). Deciding what precautions are required, and then preventing or controlling any risks follows this.

Only approved pesticides should be used and labels should include a MAFF or HSE number. The 'conditions of use' should always be followed and anyone working with pesticides must be competent and has obtained their PA qualifications. Ongoing training for the spray operators is essential.

New Product Development

New chemical control products entering the market have to meet stringent new guidelines laid down by the EU, so it is fair to say that any new products brought onto the market will be the most efficient and safest products ever seen in the turf and amenity industry.

Most new chemical actives now tend to be of a much lower rate and have a more efficient formulation resulting in fast uptake, low residues and less active ingredient needed for control. This greatly reduces the amount of active ingredient released into the environment during application and therefore the risk of mammalian toxicity.

Heritage and the new fungicide Banner MAXX both have one of the lowest use-rate ranges in the turf grass fungicide market. They offer several significant advantages to the spray operator:

- Low acute toxicity
- Non-sensitising
- Low use rates, which reduce the amount of product handling
- Non-neurotoxin, non-carcinogenic and non-oncogenic
- Not readily absorbed through the skin
- No buffer (no spray) zone required

Local Environmental Risk Assessment for Pesticides

Certain pesticides have an aquatic buffer zone requirement when applied by horizontal boom or broadcast air-assisted sprayers, as some are very toxic to aquatic life. If you want to reduce this aquatic buffer zone, there is a legal obligation to carry out and record a Local Environment Risk Assessment for Pesticides (LERAP). It is important to remember that without effective buffer zones many sprays may not remain on sale. LERAPs provide greater flexibility in the application of buffer zones without additional restrictions.

Follow these six steps to produce a LERAP:

- Map out and categorise streams/ponds/rivers
- Display the map where spray operators can see it
- Establish whether any products used are LERAP category A or B
- If A leave a 5m buffer zone. If B refer to LERAP website for recommendations depending on type of spraying equipment being used
- Inform spray operator of required buffer zone
- Record your decision and relevant factors





There are new products coming through, although probably not as fast as we have been losing them. Therefore the industry does have to look at alternative methods for controlling pests and diseases. IPM (Integrated Plant/Pest Management) has been around for a long time, especially in the horticultural industry. The definition is: 'Attempt to control pests using various different proactive management strategies, considering everything that may affect pest development'.

After considering and adopting all cultural and preventative treatments it may still be necessary to use a 'control' treatment, with the most appropriate control product. Control products are still very much part of IPM! Scotts is committed to helping turf and amenity managers to manage their turf and amenity areas in a proactive and environmentally friendly way. This means providing advice and information to help prevent attacks in the first place.

If attacks do occur, try to find out why they are occurring and work on a plan to prevent it happening again. The idea is to have a specific plan for all areas that are managed.

The basic plan components include:

- Site assessment – Understanding conditions that favour the pest – unique to your turf area (map of area needed)
- Monitoring – accurate identification needed of more unusual diseases/include training in the plan
- Setting thresholds – how little/much is acceptable
- Identifying management options – e.g. cultural
- Building pest profiles – for each disease – now and for the future
- Proactive turf management – what is actually being done to manage disease
- Evaluation – is the plan working.

Application technology and equipment

Application and equipment has played a huge part in improving the efficacy of chemical usage and in protecting the operator and the environment.

The efficacy of a chemical application is clearly dependant on the chemical itself as well as its formulation, as already mentioned, but most importantly it's the delivery to the target site.

Here are some examples of efficient application technologies:

- Low drift nozzles
- Better boom suspension
- Re-circulating systems
- Pre-mix tanks, less handling of AI
- Shrouded (covered) booms
- Computerized calibration systems

Conclusion

Despite the major developments throughout the years, the ultimate safety of chemical usage is dependant on the operator. Therefore regular ongoing training is essential for the safety of not only the operator but for the general public and the environment.

For further details about Scotts' products, contact the company at Paper Mill Lane, Bramford, Ipswich IP8 4BZ. Telephone: 0871 220 5353, fax: 01473 830386, email: prof.sales@scotts.com website: www.scottspromotional.co.uk

ALWAYS READ THE LABEL. USE PESTICIDES SAFELY.

Category A products: Alpha Chlorpyrifos 48 EC; Mavrik.

Category B products: Alpha Atrazine 50 SC; Alpha Briotril Plus 19/19; Alpha Bromotril P; Alpha Linuron 50 SC; Alpha Protugan Plus; Alpha Simazine 50 SC; Harlequin.

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