

Teagasc Notes for the week ending Friday 30th June 2017

Rush Control and Water Quality

Key Home Messages

- Beware! Spraying rushes can very easily lead to breaches of the drinking water standard for pesticides, particularly if using MCPA.
- All MCPA products for rush control have a 5m buffer zone from watercourses (this includes any dry drains that could hold water)
- MCPA products cannot be used in weed lickers or knapsack sprayers
- All MCPA containers should be triple rinsed after use with the rinse put into the sprayer.
- All foil lids from MCPA containers should be put back into the triple rinsed containers.
- Mechanical control should be the first option and then spray the regrowth and target only the rush affected areas.
- Do not fill sprayers from watercourses.
 - Ensure that the sprayer operator is aware of any drinking water abstraction points or wells in the local area (5m to 200m Safe Guard Zones)

Introduction

Rush control normally takes place in June and July and involves the use of MCPA products, however in recent years drinking water monitoring results for Ireland show that a number of herbicides commonly used on grassland, such as MCPA have been detected in drinking water.

- MCPA is water soluble and takes several weeks to break down.
- Rushes thrive in poorly drained areas (with a water table near the surface) which are prone to runoff to nearby water bodies.

Herbicides can enter water bodies from:

- **Point sources** (mainly in the farm or farmyard) – leaks from storage areas; spills or drips from handling operations such as mixing, filling and washing; or
- **Diffuse sources** (mainly in the field) – inputs arising during or after application from processes such as spray drift, runoff and drainage.

What to do

- Use non-chemical control methods e.g. cutting, drainage, sward improvement.
- When spraying, target only the rush affected areas and, cut rushes one month before or one month after spraying to improve the effect of the spray.
- Consider weed wiping with an appropriate herbicide (not MCPA) as a rush control option.
- It is essential to take great care and follow best practice procedures when using any pesticide and particularly so in the case of herbicides used on grassland.

Weeds in Grassland

- Don't underestimate basic grassland husbandry such as applying lime, fertilizer, topping or reseeding as weed control measures.
- Low levels of weeds do not affect grass production and are beneficial to the environment.
- A vigorously growing grass sward can out-compete weeds and prevent new weeds growing.
- Spraying at the right time doubles the effect of the spray.

DO's when using herbicides:

- **DO** read the product label instructions carefully and plan the treatment in advance.
- **DO** inform yourself of the location of all nearby water bodies
- **DO** find out if any groundwater body or surface water body in your locality is used as a drinking water source and, if so, the location of the nearest abstraction point.
- **DO** ensure that herbicide and pesticide products are stored in a secure, dry area which

cannot result in accidental leaks or spills. Empty, triple-rinsed containers should be disposed of in accordance with the Good Practice Guide for Empty Pesticide Containers.

- **DO** ensure that application equipment is properly calibrated and in good working order.
- **DO** take every precaution during mixing and preparation to avoid spills and drips. Minimise water volumes (rain and washings) on the handling area.
- **DO** consider using drift-reducing nozzles if spraying. Keep the spray boom as low as possible to the ground and use the coarsest appropriate spray quality.
- **DO** clean and wash down the sprayer at the end of the day, preferably in the field and well away from water bodies or open drains. Tank washings should be sprayed onto the previously sprayed area, on a section far away from any water body, observing the maximum dose for that area.

DON'Ts when using herbicides:

- **DON'T** perform handling operations (filling, mixing or washing the sprayer) near water bodies, open drains or well heads. Maintain a distance of at least 10 metres and preferably 50 metres, where possible. **DON'T** fill the sprayer directly from a water body.
- **DON'T** spray if the grass is wet or if heavy rain is forecast within 48 hours after application. **DON'T** spray during windy conditions.
- **DON'T** spray near open drains, wells or springs.
- **DON'T** spray on waterlogged or poorly draining soils that slope steeply towards a water body, drain, well or on any other vulnerable area that leads directly to water.
- **DON'T** discard sprayer washings down a drain or onto an area from which they can readily enter a water body.

Safeguard Zones

- Statutory 'no-use' zones (called safeguard zones) apply around drinking water abstraction points, ranging from 5 metres to 200 metres depending on the size of the supply. Your Local Authority or The National Federation of Group Water Schemes can advise on this.

Remember

- Careless storage, handling or use of pesticides can easily cause breaches of the legal limit for pesticides/herbicides in drinking water.
- A single drop of pesticide/ herbicides lost to a water body such as a typical stream (1 metres wide, 0.30, metres deep), for example can be enough to breach the legal limit for pesticides/herbicides in drinking water of 0.1 part per billion along 30km of its length.
- Check how near water bodies (ditches, streams, ponds, rivers, lakes, etc), drinking water abstraction point or wells are to where you are working.
- For GLAS LIPP (Low Input Permanent Pasture) "Where present, rushes must be controlled either mechanically, by weed wiping using glyphosate and/or by spot spraying. While weed wiping and/or spot spraying can take place between 15th March and 15th July, topping to control rushes cannot take place between these dates"
- For GLAS (Traditional Hay Meadow) - Where present, rushes must be controlled either mechanically by weed wiping and/or by spot spraying. While weed wiping and/or spot spraying can take place between 15th March and when the meadow is mown annually, topping to control rushes cannot take place between these dates.

A Teagasc AHI Beef Health event will take place on the farm of Walter Cleary, Kilmacow, Co. Kilkenny on Thursday, June 29th at 11.00 am. What can faecal samples tell us about parasites in our herds? See results from real farms and hear how to take samples and understand how the results can support parasite control programmes in your herd. The host farmer and his vet will discuss the on-farm herd health plan and preventive measures including vaccination policy. The objective is to keep stock healthy while reducing the reliance on antibiotics. There will be a demonstration by the Regional vet lab on identifying health problems in slaughtered cattle and the steps to eliminating Neospora abortion will also be discussed. All are welcome.