NUTRIENT MANAGEMENT
Information Sheet

CatchmentCARE
Community Actions for Resilient Ecosystems

This Nutrient Management Information Sheet has been produced by AFBI and CatchmentCARE to demonstrate the value of nutrients, soil and why good nutrient management is about more than just the fertilisers you buy; it can save you money as well as help protect the environment.

Looking After Your Soil

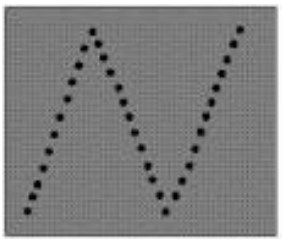
Test your soil every 4-5 years

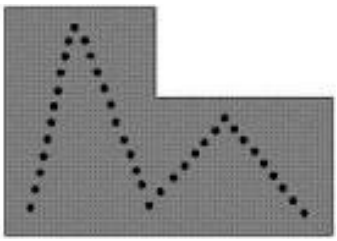
Regular soil testing will help:

- Improve soil fertility and nutrient use efficiency
- Optimise grass yields and grass quality
- Save you money on unnecessary fertiliser
- Reduce the loss of excess nutrients to waterways
- Eliminate nutrient deficiencies

Guidelines

- Soil sample during the closed period, ideally at least 6 weeks after slurry or fertiliser has been applied.
- Sample in a 'W' formation across fields
- Apply lime if needed and maintain the recommended soil pH (NI pH 6.0-6.2; ROI pH 6.3-6.5) for continuous grassland





NUTRIENT MANAGEMENT TIPS

SOIL

- Test your soil every 4-5 years
- Apply only the nutrients you need

SLURRY

- Slurry is a valuable source of N, P & K.
- Where possible, avoid applying slurry to fields already high in phosphorus
- Maintain distance from water courses

FERTILISER & LIME

- Apply lime to maintain your soil pH (NI pH 6.0-6.2; ROI pH 6.3-6.5)
- Apply fertiliser to minimise nutrient deficiencies, particularly K & S
- Do not apply phosphorus fertiliser if Olsen soil P index is greater than Index 2 or Morgan soil P index is greater than Index 3

BEST MANAGEMENT PRACTICE

- Do not apply slurry to wet soils and if heavy rain is forecast
- Take care to minimise soil compaction
- Do not drive heavy machinery on wet soils
- Avoid poaching by grazing livestock.

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Slurry and Fertiliser

Slurry is a valuable source of nitrogen (N), phosphorus (P) and potassium (K):

- Make the most of slurry nutrients by spreading in March and April prior to spring growth
- Use low trajectory spreading techniques such as trailing shoe. However care is required using trailing shoe on sloping ground as this can be a source of P loss
- Trailing shoe can improve N use efficiency and increase yields by up to 25%
- Test your soil and avoid applying slurry to fields high in phosphorus
- Do not apply slurry to saturated soils and when heavy rain is forecast
- Do not apply slurry in the closed period - 15 Oct – 31 Jan (NI & Zone C in ROI)
- In NI, do not apply slurry within 10-15m of a stream or river, 20-30m from a lake and 50m from a well or borehole. The larger buffer distances apply from 30th September to 14th October and during February (NAP, 2019).
- In ROI do not apply slurry within 5m of a stream or river, 20m from a lake or 25m from a well or borehole. The buffer distance should be doubled to 10m of a stream or river in the 2 weeks before and after the closed period (Good Agricultural Practice 2019). See related infographics on www.catchmentcare.eu.

Nutrient Management: Get the balance right

Phosphorus (P)

- Target Olsen soil P Index 2- (16-20 mg/l Olsen P) or Morgan soil P Index 3 (5.1-8.0 mg/l Morgan P)
- Regular soil testing indicates P requirement
- Too much P in soil is harmful to the environment, particularly local water quality
- Too little P will reduce yields

Nitrogen (N)

- Slurry is a valuable source of N
- Do not exceed the fertiliser N limit for your farm
- Spread N applications through the season. Grass often displays N deficiency at 2nd & 3rd cut

Potassium / Potash (K)

- Potash improves N use
- Test your soil. K deficiency can reduce yields by 20%
- Avoid high K application in spring on grazed land. High K inputs can contribute to the development of grass tetany in grazing animals

Sulphur (S)

- Many soils in NI and ROI display S deficiency, particularly at 1st cut (April/May)
- Yield losses can be as much as 30% due to S deficiency
- S deficiency can reduce the feeding value of grass; S being a key component of protein
- Apply S-containing fertilisers regularly for 1st cut silage (NI 35-40 kg/ha SO3; ROI 20 kg/ha S)

Department of Agriculture, Environment and Rural Affairs
www.daera-ni.gov.uk

Interreg Northern Ireland - Ireland - Scotland
European Regional Development Fund

An Roinn Tithíochta, Pleanála agus Rialtais Áitiúil
Department of Housing, Planning and Local Government

www.catchmentcare.eu