

## BIG OPPORTUNITY TO INCREASE FERTILISER USE ON GRASS

**Increasing fertiliser use to offset some of the surge in purchase feed prices and help preserve margins is a realistic option for many dairy farmers according to Promar Senior Consultant Andrew Hawkins.**

Using aggregate data from Promar's Milkfinder service, Mr Hawkins argues that increasing feed use has been accompanied by a decline in fertiliser applications but the economic situation means a reversal may well be in order.

"Since milk quotas ceased to be an effective constraint on production, purchased feed use has increased steadily as farmers sought to increase yields per cow and total farm output. For Milkfinder customers the average feed rate increased from 0.32kg/l in 2002 to 0.37kg/l in 2010."

While this approach was justifiable when feed was comparatively cheaper over the last 10-15 years, it is coming under close scrutiny as rising feed prices have closed the milk price: feed price ratio markedly. Concentrate prices have risen this winter by over £40/t which will have increased average feed costs by at least 1.5ppl, and they will continue to rise this summer.

Mr Hawkins says many farmers need to critically appraise their systems and find ways to reduce production costs. One obvious candidate is to increase yield from home grown forage.

"The British Survey of Fertiliser Practice shows the average use of nitrogen fertiliser on GB dairy farms is now just 120kg/ha, well below the optimum.

"Two main factors have contributed to the reduction in fertiliser use. The first is in the increased awareness of the value of slurry and certainly P and K use has halved in 10 years. The second and more important factor has been market conditions.

"The fertiliser market has been incredibly volatile and farmers have seen cutting back on fertiliser as a way to save costs, especially when supply has been scarce leading to spikes in prices. However all the data show that increasing fertiliser N use back to earlier levels will be cost effective even at current prices of around £290/t."

Quoting the NIAB GM20 trials, Mr Hawkins explains that on an average site, the dry matter response is 28kg grass DM from each extra kg of nitrogen. At 12MJ ME/kgDM that is 61 litres of milk per kg nitrogen compared to around two litres per kg feed DM.

"The trials show a cost effective response to increasing nitrogen up to at least 250kgN/ha. The average farmer could target increasing nitrogen use by 70kg/ha. This would give an extra 1960kgDM/ha, sufficient to produce 4,350 litres from forage or potentially drive up milk yield per cow for practically no extra concentrate.

"For the average 150 cow herd, being kept on 75ha of grass, the additional nitrogen would cost £4400 at 84p/kgN. The concentrates required to achieve the same yield response would cost around £34,000. This is a significant saving and something all dairy farmers should be investigating," Mr Hawkins concludes.