

# Plocher News Update

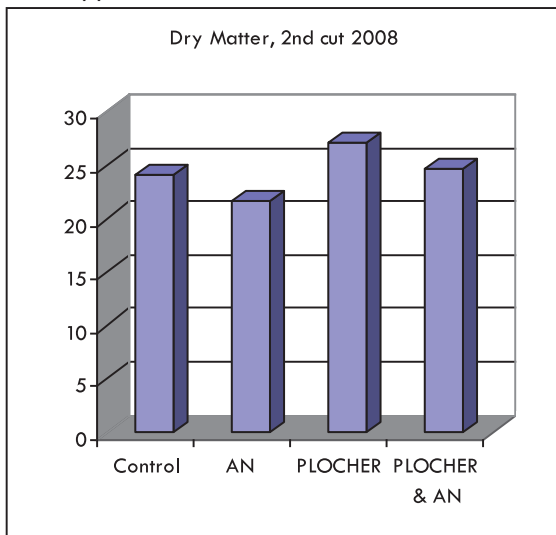
SWIFT NATURE

Spring 2009 ♦ Issue 3

## Kingshay research shows continued improvements in the nutritional value of swards where PLOCHER™ products are applied

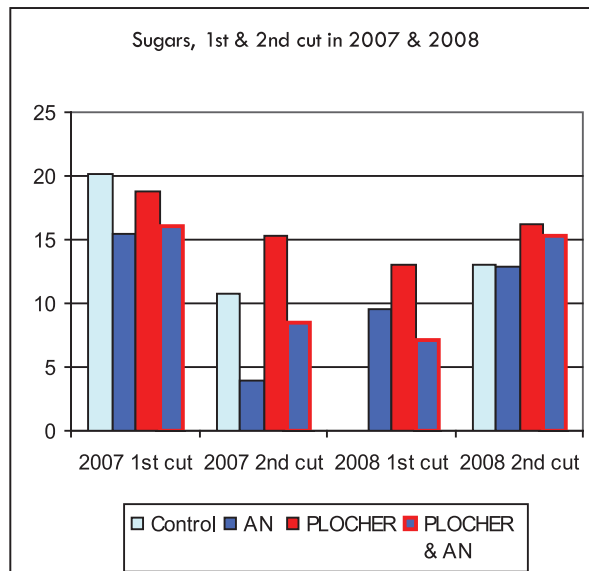
Kingshay Farming Trust, Somerset repeated research into the performance of PLOCHER™ products on grass leys in 2008. "Grass quality tended to be higher where PLOCHER products were used in both 2007 and 2008," reports the conclusion.

Triple replicate comparisons were repeated on a sward of perennial ryegrass with white clover. Use of Plocher Soil Activator and PlantDO was compared with, and without, industry-standard applications of Ammonium Nitrate.



Fresh Yield was lower where PLOCHER products were applied compared to plots where Ammonium Nitrate was applied, yet Dry Matter Yield was marginally better indicating that excess water does not bulk out the grass. Where PLOCHER products were applied, Dry Matter was on average 3.5%

higher than where Ammonium Nitrate was applied alone. Plots treated with PLOCHER products alone had higher sugar levels at both 1st and 2nd cut as well as a higher D value at 2nd cut.



continued on back page

Waterlogged, anaerobic soils continue to plague us as there seems to be no let-up in poor weather conditions.

PLOCHER products can speed the reversal of poor soil conditions and thereby your fortunes through the use of PLOCHER-treated slurry and manures, as well as utilising Plocher Protocols for crops.

Since our last newsletter, we have applied for, and received, certification from SOPA, as well as Organic Farmers & Growers and the Soil Association's Verification Scheme for PLOCHER products. There has been some mix-up at the Soil Association, as not all their staff seem to be aware of our approved status; however, I am assured by them that they are trying to remedy this situation. Please note that even though PLOCHER products have a restricted status, you do not need a Soil Association derogation – you simply need to record the fact that you are using PLOCHER products.

Let's hope spring comes soon, allowing soils to dry out in time for drilling and slurry/FYM spreading. We certainly deserve a warm summer this year!

Charlotte Wilson

SWIFT NATURE

PO Box 2222  
Foscott  
Buckingham  
MK18 6WZ

Phone: 01280 822 188

Website: [www.swiftnature.co.uk](http://www.swiftnature.co.uk)

PLOCHER



# Plocher News Update

## Sceptical dairy farmer's slurry "bubbles like a witches cauldron!"



'chips' on British Farming Forum posted the following comment about his experience with Plocher Slurry Treatment:



"I must admit I was a sceptic until I tried Plocher Slurry Treatment. So I thought I would post a couple of photos of PLOCHER working on our farm.

The pictures are of our lagoon that has filled with slurry over the summer. As the cows weren't in the cubicles much I stopped using Plocher Slurry Treatment, so a crust had formed over the slurry. As I started buffer feeding over the last six weeks the cows started using the cubicles more so I started using Plocher Slurry Treatment again to help prevent staph uberis.

In the photos you can see the crust starting to break up where the treated slurry mixes in with the old stuff. The second photo is a close up to show clearly the bubbling effect it has on the slurry. While you stand there new bubbles are appearing all the time.

Don't know how it works, as a Chemist would say I just added chalk to my slurry but a physicist might one day work out what is going on. One thing is for sure... something is going on!"

'chips' is an organic dairy farmer in Shropshire.

**"YOU CAN SEE THE CRUST STARTING TO BREAK UP WHERE THE TREATED SLURRY MIXES IN WITH THE OLD STUFF."**

## Cornish farmer turns £185 purchase into a £4,000 increase in profit margin

John Warne, near Truro, Cornwall has been using Plocher Slurry Treatment since September 2008. He has received an extra 0.05p/litre on 900,000 litres of milk in the three months to January 2009, as a result of an improvement in cell counts.

With a crusting problem in their slurry tanks and cell counts at around 350 in 2008, John decided to give Plocher Slurry Treatment a try – despite being convinced cell count pressures were not environmental.

John quickly noticed a big drop in ammonia levels and, by the end of October, cell counts had started falling. He told us, "We are getting bonus payments now, which will pay for the PLOCHER."

At the end of November 2008, he had some of the slurry pumped, and he commented, "It seemed easier to pump and more of it than usual was shifted."

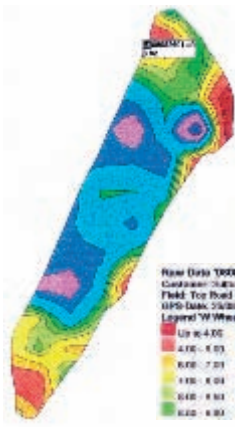
10kg Plocher Slurry Treatment (which lasted three months) cost him £185, resulting in a net

increase of £4,100/year to his bottom line.

Charlotte Wilson commented, "This is just the beginning of the savings which John will make. When he spreads PLOCHER-treated slurry on fields in the spring and through the summer, he will find he needs a lot less fertiliser than usual, and the nutritional value of crops and grazing will begin to improve, which will save in future feed and mineral costs for his dairy herd."

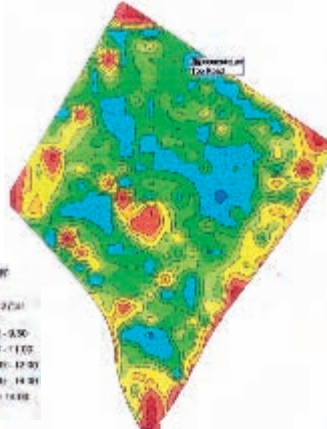
## £44/acre saving + ½ ton/acre yield increase in 2nd wheat

GPS MAP—8 SEPTEMBER 2008  
PLOCHER-treated



Tested and calibrated over a weighbridge to 1.4% accuracy

Untreated



Warwickshire arable farmer, Lee Sutton, trialled Plocher's Protocol for Cereals on 1ha of a 21ha field for a second year in 2008.

He reduced fertiliser and sprays by 30% where PLOCHER products were applied saving him £60/acre. PLOCHER products used cost him £16/acre, so his overall saving was £44/acre.

Yield in the PLOCHER-treated area was 4.25 tons/acre compared with 3.7 tons/acre on the remainder of the field. Detailed report available.

## Better atmosphere... cleaner, firmer bedding

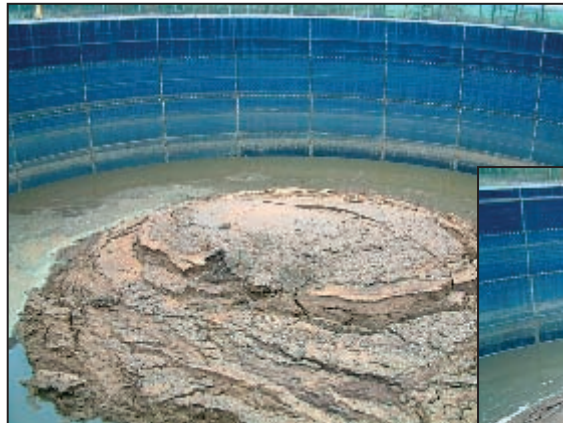
Matthew and Caroline Robinson milk 100 cows and followers in the Weald of Kent on a loose housing system.

The concept of a firmer base to straw bedding, less heating up, plus, lower ammonia levels in cattlesheds, persuaded Matthew to start using Plocher Komposter in the straw each week.

Over the past three months, all these benefits have been delivered, and Matthew no longer needs to clear the bedding as often as he used to. He has noticed that even on particularly cold and frosty mornings, there is no haze in the cattlesheds anymore.

## Bishop Burton news...

"For the first time, we can now genuinely say we are treating slurry as an asset rather than a liability. Developing the dirty water system, including diverting parlour washings from the slurry, has reduced the rate of fill of our slurry stores by at least 60%. We can now comfortably store slurry over the NVZ closed period, and thanks to the use of Plocher Slurry Treatment, we haven't any problems spreading the much higher dry matter slurry. As can be seen from our photographs we're even making progress



Left: Solids in the pig slurry store in February 2008

breaking down five years of solids that have settled in the pig slurry store, again thanks to the PLOCHER treatment."

British Farmer & Grower, February 2009



Below: Solids in the pig slurry store in December 2008

## Bishop Burton reduces reliance on artificial fertilisers

Whilst climatic conditions were against Bishop Burton College during the 2008 harvest (a combine without yield monitoring equipment was hired-in to harvest part of the farm so there are no specific yield results comparing fields), Colin Dennis reported that PLOCHER-treated slurry and an application of lime transformed a 8ha field of permanent grass, allowing stocking rates to be dramatically increased. Colin comments, "The quality and yield of grass from this field was tremendous whereas it was very poor when we took it on."

### MAIZE

In addition, all fields where maize was grown at Bishop Burton College in 2008, had PLOCHER-treated slurry applied from February 2008. A maximum of 50 kg/ha of nitrogen was applied, with one field receiving no nitrogen at all. At harvest, quality was assessed as being very good, and a yield of 45 tons/ha was recorded in the best field, with 850 tons of top quality maize silage being grown across 20 ha. Colin adds, "Crops across fields spread with PLOCHER-treated slurry were strong and healthy. Yields were as good as usual whilst we used a lot less fertiliser than in previous years. In June, during a stock-take of fertiliser, we realised we had saved 11 tons of ammonium nitrate as a result of using less on crops spread with PLOCHER-treated slurry."

"THE QUALITY AND YIELD OF GRASS FROM THIS FIELD WAS TREMENDOUS WHEREAS IT WAS VERY POOR WHEN WE TOOK IT ON."

## £16.80/ha spend on PLOCHER = 1.5ton/ha increase in wheat yield

In April 2008, Waddesdon Farm's Manager, Al Brooks, suggested their 2nd wheat (variety: Gladiator), would be a prime candidate on which to test PLOCHER products. It was growing in anaerobic, heavy clay soil and showing signs of stress with no bulk to its growth.

In mid-May 2008, a first application of Plocher ActiveLeaf and Plocher PlantVital were applied to half of the field – approximately 5ha, at a cost of £8.40/ha. A repeat application was made three weeks later on 9 June 2008.

After harvest, Al Brooks states, "Where we used PLOCHER, there was up to a 1.5 ton/ha yield improvement on the combine and spot rate to a line, which could clearly be seen. There was better root development and soil structure. PLOCHER has worked well, and was definitely worth applying. In 2009, I intend to try it on a high-yielding variety."

Charlotte Wilson took samples on 9 June 2008. In PLOCHER-treated samples, soil structure was significantly improved – it was crumblier and higher worm numbers were recorded



compared with untreated samples. Soil in untreated samples was virtually impossible to remove to observe the root system, resembling plasticine. Grains in the PLOCHER-treated samples were more consistent and larger.



# Plocher News Update

## Kingshay research continued

In August, soil and forage samples were taken from the plots for analysis.

In plots treated with PLOCHER-only, a 73% increase in microbial activity was measured in the soil, with a 58% increase in total potassium, 10% increase in magnesium, 16% rise in iron, 5.6% improvement in selenium levels and boron was 145% higher compared with plots receiving Ammonium Nitrate only.

In plots which were treated with both PLOCHER and Ammonium Nitrate, microbial activity was 68% higher, than Ammonium Nitrate only plots, with a 53% increase in total

potassium, 13% rise in iron, 5.6% improvement in selenium levels and boron was 118% better.

Forage analysis showed a 49% increase in calcium, 33% improvement in magnesium, 32.5% rise in cobalt, and 68% more iodine in forage from PLOCHER-only treated plots

compared with plots where only Ammonium Nitrate was applied. Compared with plots receiving both PLOCHER products and Ammonium Nitrate, there was a 24.6% increase in calcium, 20% improvement in magnesium, 22% increase in chloride, 12.5% rise in

cobalt, 16% more copper, and 30% more iodine.

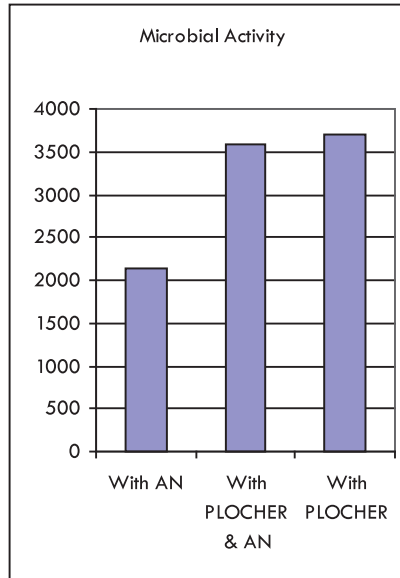
magnesium and cobalt. Dairy cows require a minimum of 0.85% calcium in their total diet, and PLOCHER products have increased calcium levels from 0.65% where Ammonium Nitrate was applied to 0.97%. Cobalt is an integral part of vitamin B production, so the 32.5% increase in this element is important. The Crude Protein levels are surprising, and I would like to see what proportion of the Crude Protein levels are nitrate, because more than 100ppm in feed is detrimental to the cows health."

Charlotte Wilson comments, "As well as improving the nutritional value of the sward, PLOCHER products increase oxygen levels at the roots. This increases aerobic microbial levels in soils, as shown in the soil analysis, but also reduces the prevalence of germs such as clostridium and e-coli so that forages

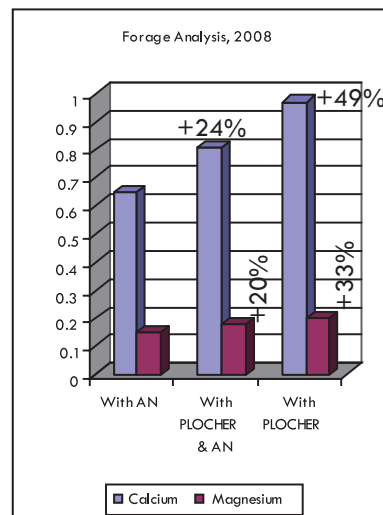
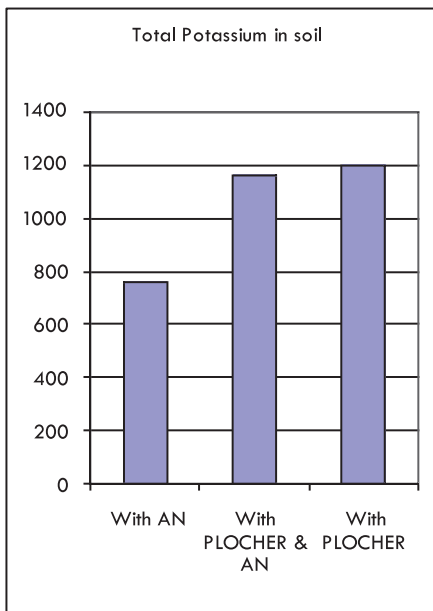
become more hygienic. As soils become tighter and more compacted with the use of fertilisers, and now that soils are so waterlogged, anaerobic soil conditions are a real problem. PLOCHER products reverse anaerobic conditions more quickly than is possible in Nature alone, and this helps to reverse the fortunes of farmland suffering at the moment."

She continues, "The health of your soil has a direct impact on the forage quality, which in turn, affects the health of your cows. Clearly, this impacts profitability enormously."

**"PLOCHER PRODUCTS HAVE INCREASED CALCIUM LEVELS FROM 0.65% WHERE AMMONIUM NITRATE WAS APPLIED TO 0.97%."**



On assessing samples of soil visually, Charlotte Wilson of Swift Nature said, 'it was clear that increased microbial and worm activity in soil samples stimulated by PLOCHER products had opened up the soil and released an improved balance of essential nutrients.'



Alwyn Humphreys of AgriKing confirms, "It is clear that PLOCHER products offer significant improvements in crucial dietary requirements, particularly calcium,

**CONTACT US ON 01280 822 188 FOR MORE INFORMATION**