The quality of grass silage on Reggie Lilburn’s farm in Dromore, Country Down, has improved considerably and resulted in significant financial benefits, following the application of Calcifert Sulphur. Having enjoyed success using the product over the previous two years, Reggie made a single application of Calcifert Sulphur to all his fields, at a rate of 125 kg/ha (1 bag/acre). Slurry was applied to all fields before each of the farm’s three silage cuts, along with nitrogen fertiliser.
Silage quality
2014 silage analysis shows the quality of forage produced on farm was consistently higher across cuts when compared with the season’s average for the area.

<table>
<thead>
<tr>
<th></th>
<th>1st Cut</th>
<th>Area Avg</th>
<th>3rd Cut</th>
<th>Area Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Matter %</td>
<td>31.2</td>
<td>27.1</td>
<td>31.5</td>
<td>28.5</td>
</tr>
<tr>
<td>Protein % DM</td>
<td>14.2</td>
<td>10.8</td>
<td>14.7</td>
<td>12.6</td>
</tr>
<tr>
<td>ME (MJ/Kg)</td>
<td>11.6</td>
<td>10.6</td>
<td>11.5</td>
<td>10.6</td>
</tr>
<tr>
<td>D Value (%DM)</td>
<td>72</td>
<td>66</td>
<td>72</td>
<td>66</td>
</tr>
<tr>
<td>FIM intake</td>
<td>105</td>
<td>88</td>
<td>107</td>
<td>90</td>
</tr>
</tbody>
</table>

With sulphur forming the core element of two amino acids essential in the construction of protein, the exceptionally high protein rate of Reggie’s first cut silage can be directly accounted for by the application of Calcifert Sulphur.

These higher protein levels also ensure high levels of sugar accumulation within grass, which improves the fermentation and future digestibility of silage.

This is the third year Calcifert Sulphur had been used on Reggie’s farm and is now viewed as an integral part of his annual fertiliser application regime.

Reggie estimates grass yields have improved to around 2.3t DM/ha (0.95t DM/acre) with improved quality through increased protein levels. He has also seen cattle achieving higher rates of dry matter forage intake.

Financial benefits
Based on the first cut silage, farmers using Calcifert Sulphur would be able to formulate diets 41p per cow per day cheaper compared to farms achieving the nutritional value identified in the area average.

Reggie’s herd comprises 250 autumn calving cows and assuming the herd is housed and fed a full ration for 180 days, the farm could save £18,450 (£73.80/hd) by feeding silage with similar nutritional traits to that analysed in his first and third cuts.

The high quality of silage indicates concentrate feeds could also be reduced by 1kg per cow per day compared to the previous year. Assuming approximately 75 of Reggie’s heifers are put on a new, low concentrate diet, the annual winter feed saving (based on a diet costing £160/ton and animals being fed for 180 days) should be £2,160. This equates to a saving of £28.80/heifer and a reduction in concentrate use of 3.5 tons.

By using Calcifert Sulphur, this represents a total saving in winter feed costs of £20,700.

Summary
With volatile milk prices putting a pressure on profitability, the need for quality forage is paramount. Balanced fertiliser programmes must be followed to ensure the growth of nutritionally rich forages, enabling farmers to maximise silage use and reduce feed costs.

About Calcifert Sulphur
Applying Calcifert Sulphur is a quick and easy way to supply both calcium and sulphur to soil.

With a typical analysis of calcium as CaO: 39% and sulphur expressed as SO₃: 56%, Calcifert Sulphur is one of the purest calcium sulphate products on the market. Calcifert Sulphur has a neutralising value of zero, meaning it won’t affect the pH of your soil.

It can be easily applied using a tractor-mounted fertiliser spreader, providing flexibility to farmers and growers.