Cutting edge

Gordon Peppard looks at the main factors in silage quality and talks to a Green Acres farmer who has achieved impressive results

Silage is an expensive crop to produce therefore getting the balance right between having quantity and quality so correct quality is very important. Leaving the cutting date too long in order to bulk up the yield of the crop can have huge consequences in terms of losses in quality.

The following are some important factors in silage quality.

1. Every week that harvesting is delayed will increase the amount of low digestibility stemmy material and decrease the amount of high quality leafy material.
2. Ryegrasses have higher sugars and are easier to preserve, thereby making it much easier and more reliable to produce high quality silage from grass with a high level of ryegrass.
3. If the pasture was not grazed prior to being closed up for silage there will be a huge amount of nutrients in the form of three and a half bags of Sul CAN per acre, five to seven days later.
4. All silage fields on Joe’s farm were grazed out bare in the spring before closing up, this removes poor quality dead butt that may otherwise appear in the silage pit.
5. All silage fields on Joe’s farm were grazed out bare in the lead to heating at feed out.

Soil fertility

Silage crops remove a huge amount of nutrients from the soil and if these are not replaced there will be poor growth and therefore poor yields and quality.

Recent soil analysis show Joe’s silage fields to be at index 3 and 4 for P and index 2 and 3 for K, these are adequate levels of P and K but with high levels of nitrogen these fields have a pH reading above 6.3.

Main reasons for a drop in quality

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<td>Poorly preserved crops</td>
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Joe Farrell produced great quality first cut silage

The swords are kept very clean and weed free.

The dry matter of the crop is used to determine the quality of silage. If the material is not fully dry it will not be of a good quality and may not be acceptable for use in the cattle diet.

The Science of Healthier Animals

Grasstobeeef programme advisor for the Teagasc Green Acres Grass to Beef programme.

Joe Farrell

Fertiliser application

Shurry should only be spread on bare or very low covers.

Silage crops have a big demand for nutrients, therefore match crop requirements depending on soil fertility status and on how much slurry has been applied.

All silage fields on Joe’s farm received early spring nitrogen in the form of three and a half bags of 13/0/25 plus 30 units of nitrogen and were subsequently grazed.

It is estimated that approx. 20–30pc of this spring nitrogen is still available to the silage crop.

When the silage fields have been grazed bare they then receive approx. 3,000 gallons of slurry followed by 1.75 to 2 bags of Sul CAN per acre, five to seven days later.

New reseeds can receive up to an extra 20 units of Nitrogen per acre.

While 16 units of sulphur should be applied per cut, particularly on lighter land. In order to ensure that there is enough sulphur Joe uses products like Sul CAN or compounds with sulphur added.

Cutting date

Ensure to cut the crop before it starts to head out. For most grass varieties this generally occurs between the middle and end of May.

The poor weather at the end of May last year made it quite difficult to get the correct cutting day, but Joe availed of two reasonable days to cut on May 29 and pick up on the 30th.

The sword wasn’t tided, just left in its row for 24 hours and then picked up.

The dry matter of the crop was only 20pc due to the poorer weather at and prior to harvest, ideally Joe would like it to be higher not to have such wet silage to handle.