

Technical Update – Mid Season Forage Options



Information correct as at 09:00am on 23.06.2023.

- Despite some rain recently, it is still very dry over much of GB.
- After last year's drought there was little forage carryover
- Wholecrop can be used to fill the gap and will be ready to harvest earlier than usual.
- What to do with light silage crops

Although rain has fallen across much of GB over the last week or so and there is potentially more to come, the fact remains it is very dry for the time of year and forage stocks are under pressure. This is compounding the potential shortages set up by the drought of 2022 and the wet spring.

Fermented Wholecrop:

Normally the wholecrop season does not start until July, but with the dry spell in late May/early June an earlier start will be needed to ensure the best quality.

Cereals of any type can be harvested for wholecrop forage and regardless of the crop, the energy content is directly related to the grain: straw ratio. The optimum growth-stage for harvesting the crop will deliver the ideal balance between the starchy grain and the digestibility value of the straw. Target a harvest dry matter between 40-45% (see chart below)

DM%	Crop Colour	Grain Texture
32 – 35	Green	Soft Brie, some milky grains
36 – 38	Green	Soft Brie
39 – 42	Green, ears turning yellow	Soft Cheddar
43 – 46	Green, straw turning yellow	Soft Cheddar
47 – 54	Yellow, hint of green	Hard Cheddar, with some harder grains
55 - 65	Yellow, hint of green on stem	Hard Cheddar, with some grains impossible to penetrate with thumbnail
66 - 70	Yellow/brown, traces of green at nodes	Very hard, with grains impossible to penetrate with thumbnail

1. Take a sample of grain away from the headland/ at least one tramline into the field
2. The texture of the grain should be like soft cheddar, with no milkiness remaining
3. Straw will be starting to turn from green to yellow.
4. This is usually 3 - 4 weeks before normal combining.

Cutting height is important with a compromise between quality and bulk. When cut at the right stage, the fermentation will ensure grain is digestible, but if dry matters go above 45% then the harvester should have the processing mill engaged to ensure grain is broken so whole grain does not pass through the cow. Direct cut headers are the best option for wholecrop with many contractors now having specific wholecrop headers based on disc mowers, although combine or Kemper type headers can also be used. Crops should be chopped to <20mm.

Cereal crops often carry higher levels of moulds and yeasts than grass silages. These have the potential to grow and spread rapidly throughout the clamp, resulting in significant losses in energy and an increased risk of mycotoxin contamination. Using a good quality additive can reduce the risk of losses, but this should be treated as an addition to, not a substitute for, good clamp management. We recommend using Silo solve FC on these higher dry matter crops. The clamp should be well compacted and filled in thin layers. Use the heaviest machine available or a compactor for the best results.

- Double sheet the clamp as quickly as possible after filling, using a Silostop oxygen barrier sheet and then a quality black sheet
- Use a well weighted cover sheet or if using tyres only put a net over the top of these as birds are very fond of cereal silage.

Grass silage:

Whilst quite a lot of 2nd cut has already been taken, others are waiting for crops to bulk up before cutting again. The hot, dry weather has caused grasses to head quickly after 1st cut so any crops left standing could have a high proportion of stemmy material in them.

There is always the dilemma of taking the hit on yield at this cut and maintaining quality or going for more bulk. With some unsettled weather in the forecast the right solution will be different for each farm, but for those with swards dominated by Italian Ryegrasses we would suggest taking a lower tonnage at this stage and “resetting” the grass so that the quality and bulk can be made up in later cuts. Crops may be very light and make it difficult to justify contractors’ costs, in which case the option of baling 2nd cut and clamping later cuts will give better value for money from machinery. For crops with a greater proportion of perennial ryegrass which still have a lot of leaf in the bottom the best option may be to wait for the effect of the rain on growth.

If there has been a reasonable amount of rain, there is a danger that some Nitrogen will have moved through the soil and be taken up by the plant increasing nitrate levels in the forage. This would be another reason for opting for higher dry matter baled silage at this stage if cutting soon. Crops being left longer will have chance to utilise this N.

The dry weather will also have influenced the uptake of nutrients and there is likely to be some legacy of Nitrogen left from previous applications. It is impossible to make a general statement on how much will be carried over, but be conscious of this and reduce subsequent applications if necessary.

For further discussion or to help with any questions that you may have, please contact us on enquiries@kiteconsulting.com or 01902 851007

