

Teagasc Notes for week ended Friday May 17th 2019

Managing Silage Making

When a meadow is ready to harvest for silage-making and the contractor is booked, there are a series of steps to be undertaken to ensure the crop preserves properly in the silo or bale. In all cases, the requirements that must be met are that

- the grass is harvested free of soil or manure contamination,
- it is quickly stored under air-free conditions, and
- a lactic acid fermentation then dominates the preservation of the crop.

The prevailing weather conditions play a huge role in how straightforward or difficult this process will be.

Ensilability

Meadows differ greatly in the ease with which they can be preserved as silage (i.e. in their ensilability). For example, it is easier to achieve good preservation with ryegrass swards that are successfully wilted than with swards that have little ryegrass and are harvested under wet conditions.

One objective method of determining the ensilability of a crop of grass is to measure its sugar content. This is a relatively straightforward test that has proven itself reliable over many years. For example, crops with more than 3% sugar (in the grass juice) are relatively easy to preserve. Knowing grass ensilability can help you make informed decisions on aspects of silage-making, including the use of an additive (type, rate of application, etc., or alternatively no additive).

Teagasc can do grass ensilability testing for you. You will need to freeze the sample before bringing it to the Teagasc office for testing.

Avoid contamination

Most grass is harvested cleanly, but occasionally contamination with soil occurs during mowing, harvesting or silo filling. A lot of effort needs to be made to avoid this since such contamination can inoculate the grass with high numbers of bacteria that are harmful to the preservation process.

Wilting means 'drying'

If grass is quickly wilted such that it dries to over 25% dry matter within 24 hours of mowing then the resultant silage should be well preserved and produce little or no effluent. Even when the weather is conducive to drying, successful wilting needs the mown grass to be tedded or placed in wide rows. Grass won't wilt when a number of rows are combined.

Air-free storage

Achieving and maintaining air-free conditions is the most important action in properly preserving grass as silage. In the case of both clamp and walled silos this means quick filling of the silo followed immediately by sealing. Walled silos should have a strip of plastic sheeting placed along the wall during silo filling, and this is then folded onto the top of the grass in the filled silo. When this is covered by two sheets of black plastic sheeting that are overlaid by edge-to-edge tyres, it is necessary to place a complete row of silt or sandbags around the entire edging of the plastic. It is particularly important that these are placed side-by-side on the plastic where it meets the walls. On farms where this is done correctly there is no waste visible on the surface of the silage when the silos are opened for feedout.

The sides of silage clamps can be challenging to seal. However, waste on the sides is avoided if its slope is not too steep. This allows the tyres on the sides to keep the plastic pressed against the silage. In addition, sandbags need to be placed tightly together all around the clamp where the plastic touches the ground.

Bales need to be wrapped in plastic stretch-film within an hour or two of being made, and the integrity of this seal must be maintained thereafter. This is easier to achieve where bales are wrapped at the storage site. Where wrapped bales need to be transported from the field to the storage area great care is needed to avoid any damage to the plastic film.

Think Safety at Silage Time

Harvesting silage is a busy time on farms with large machinery moving quickly around the farm and on public roads. Attention to farm safety is essential to ensure the work can complete without any accidents, serious injuries or even fatal incidents. Think safety during all aspects of the operation and be vigilant at all times.

Teagasc Dairy Calf to Beef Event

Teagasc has announced details of DairyBEEF2019, the Teagasc Dairy Calf-to-Beef Open Day, which will take place on the 21 May 2019 on the beef farm at the Teagasc, Environment Research Centre, Johnstown Castle, Co Wexford. All livestock farmers are welcome and encouraged to attend.

The theme of the event is 'Advancing Knowledge for an Evolving Industry'. The Open Day will feature extensive information and analysis of the four critical areas of dairy beef:

- Systems and Economics of Production
- Genetics
- Calf rearing and Health
- Sustainable Grassland Management

