

# Getting the Most Out of Your Grass Silage.

With good growth conditions this season many of you will be able to make silage. As the last few seasons have been quite variable as to the quality of grass silage produced, we thought it might be a good idea to revisit the basics of silage making. Any improvement in silage making which reduces silage dry matter losses or keeps the nutritional value of the silage closer to that of the original crop will increase the amount of milk solids produced from that silage. The three areas which affect the milk producing potential of a stack of silage are 1)the nutritional quality at the time of cutting, 2)the amount of losses which occur between cutting and feeding out, and 3)The nutritional deterioration of the crop during ensiling and feed out.

## **The seven key factors to making great silage are:**

### **Cut at the right time**

Timing of cutting is critical for maximising nutritional quality of a crop. For grass the optimum time to cut is in the early vegetative stage, with no more than 10% seed heads showing. Another rule of thumb for the best quality silage is to cut 7-10 days after the cows would normally have grazed the paddock.

### **Aim for a fast and efficient wilt**

Grass cut with a DM content less than 25% should be wilted before ensiling to avoid the risk of effluent losses. Cutting and spreading to achieve a fast, efficient wilt and getting to target DM% more quickly will reduce the amount of respiration losses that occur during wilting. Over-wilting to a higher DM% than necessary will result in avoidable losses.

### **Use a good silage inoculant**

Inoculants introduce large numbers of beneficial lactic acid producing bacteria at ensiling to ensure a fast, efficient fermentation and a quicker pH drop. This leaves less time for bad bacteria to waste sugars and break down true protein before they become inactive as the pH falls. There is extensive research that shows using a quality inoculant will reduce DM losses during fermentation. Some inoculants have also been shown to improved animal performance by increasing the milk production per kgDM of silage

### **Chop to the right length and pack well**

The chop length needs to be matched to the DM content of the crop. The drier the crop, the shorter the chop length needs to be to achieve adequate compaction of the stack. Using longer chop lengths to supply fibre for improved rumen function is not advisable if it compromises the compaction of the stack. Achieving good compaction is critical in making good silage.

### **Cover quickly and seal well with touching tyres**

The stack should be covered as soon as the stack is completed. Leaving it uncovered overnight can lead to an extra 5% DM loss. Cover with a good quality covering sheet, and place tyres on top. The tyres need to cover the whole the stack and must be touching. A 4cm slime layer under the cover does not mean that you have lost 4cm of silage, more likely 12-15cm.

### **Manage the face at feed out to minimise aerobic spoilage**

When you open a stack for feeding you expose the face to air and spoilage organisms can start to grow. If a stack is well compacted then air won't be able to penetrate in very far reducing spoilage losses. Try to disturb the face as little as possible when removing silage. Ideally stacks should be sized so that the face moves back at least 15cm per day.

### **Discard any spoiled silage**

The feeding of spoiled silage i.e. the slime layer, can have a dramatic impact on the digestibility of the silage.