

Whole-Crop Cereal Silage Harvest

Harvest Timing

Correct harvest timing of whole-crop cereal silage is important to ensure optimal yield, quality and ensiling conditions. Crops should be between 35-40% drymatter (DM) (the “cheesy dough” stage). This is the ideal time for natural preservation with soluble carbohydrates being utilised by bacteria for fermentation within 5 days of ensiling. Compaction is most efficient at this time and anaerobic conditions are easily achieved during fermentation, especially with inoculants, meaning reduced losses and a high level of animal acceptability and uptake.

Approaching harvest, the drymatter of *Crackerjack*, *Prophet* and *DoubleTake* triticale drymatter will increase by almost 1% per day (barley is 1.5-2% per day). Yield will increase about 1 t DM/ha every 5 days. Metabolisable energy (ME) will increase about 1 unit of ME every 4 days up to 40% DM. Harvesting too late can cause compaction problems, grain drop during harvest and poor utilisation by stock.

Harvest Management

Quality and yield can be manipulated by the cutting height. Trials indicate that increasing the cutting height by 10 cm on a 15 t DM/ha crop will reduce yield by 1 t and increase ME by 0.2 MJ/kg. The ME of straw is 6-7, leaf 9-10 and grain 13-14.

Direct chop is preferred, as it causes less dirt contamination. Wilting (which is not recommended) can increase DM percentage by up to 1% per hour in Canterbury’s hot, dry, windy conditions.

A 30-50 cm chop length to provide rumen stimulation is ideal for pit silage. It can be longer for baleage but can have less reliable quality. Chop length should be kept short for sheep.