



SILAGE DECISIONS FACTSHEET



CHOP LENGTH

Chopping grass can lead to more efficient silage fermentation. It allows sap, containing sugars, to be released.

Once in the clamp a shorter chopped material is easier to consolidate, so more air is squeezed out improving the conditions for crop fermentation and avoiding aerobic spoilage. A chopped material will also break down more rapidly in the rumen and lead to higher animal intakes. It is also said to be more palatable, because it ferments more quickly.

A short chop can allow faster harvesting because the amount or weight which fits in a trailer is increased, so it is often a contractor's preferred setting on the forage harvester.

However, too short a chop length, less than 10mm, can lead to scouring animals as it reduces the fibre available for good rumen function, even though animals may eat more. It can also lead to an increase in effluent loss from the clamp and some nutrients will be lost in that effluent. Losses from the clamp and efficiency of use by the animal could see 10% of the crop effectively wasted.

A long chopped silage, more than 40mm, is likely to be less effectively consolidated, leading to poorer fermentation and spoilage, which can include moulds. This is influenced by dry matter content and a long chopped, dry silage will be the most difficult to consolidate. Spoilage and reduced fermentation could see 5-10% of the crop lost.

The optimum chop length for a silage of greater than 20% dry matter is 10-25mm.

The optimum chop length for a silage of less than 20% dry matter is 20-40mm.

Further information: Update on technologies for producing and feeding silage, Proceedings of the XIV International Silage Conference (2005), by PD Forristal and P O'Keily.

Grass: Its production and utilization, third edition, Edited by Alan Hopkins, published for the British Grassland Society by Blackwells Science.

Factsheet produced by Jessica Buss, BGS and Alan Hopkins, GES Consulting.

Please note: Any changes to management should be researched thoroughly and tried cautiously. BGS and EBLEX cannot be held liable for any losses.