



SILAGE DECISIONS FACTSHEET



SILAGE WRAP

Baled silage has become popular in the UK because it saves on the capital expense of building a clamp and is easy to transport. But it is more expensive to make.

When it was first produced in the 1970s it was ensiled in plastic bags, but this is now uncommon as wrapping increases silage quality and reduces waste. Research shows baled and wrapped silage results in lower dry matter losses (effluent, fermentation and respiration) than clamped silage.

During wrapping the thin film is stretched and overlapped around the bale to produce four or six layers, although for haylage above 40% DM eight layers may be beneficial to prevent puncturing. With more layers of wrap, less air should be able to enter the bale, decreasing spoilage, losses and risk of moulds.

A research project at IGER Aberystwyth shows a silage at 22% dry matter released 28 litres/t of effluent when it had four layers of wrap and 11 litres with six layers.

Commercially-funded research at CEDAR, University of Reading, reported that with four layers of wrap wastage was almost 9% compared with 1% in those with six or more layers. More layers also maintained higher energy content and D-value.

A more recent study by Rhun Fychan at IGER Aberystwyth reported a decrease in mould from 1.75% to 0.75% when comparing four versus six layers of wrap and a predicted increase in cattle daily liveweight gain from 0.62 to 0.65kg, respectively. This 5.4kg in extra gain over winter would be worth more than double the cost of extra wrap.

Green or lighter coloured wraps are also marketed with some studies showing reduced heating in bales, compared with black wrap, providing better conditions for fermentation.

Wrapping tips

- Aim to wrap the bales within a few hours of baling
- Ensure the film is stretched correctly and has the recommended overlap
- Wrap close to the stack if possible to prevent damage and air entry in transport
- Consider vermin control and netting to stop birds damaging bales, with a type on top of each bale to keep the net off the bales.

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 BGS by Blackwells Science.

www.iger.bbsrc.ac.uk/Practice/Publications_&Leaflets/NewDevelopmentsinBaleWrapping.htm

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