

Making better conserved silage campaign

Managing red clover

The inclusion of red clover in cutting leys is a step towards improving whole farm feed efficiency for both beef and sheep producers. Trials have shown that red clover leys are capable of producing excellent quality silage that can reduce the need for bought-in feed, due to high protein levels and reduced need for nitrogen fertilisers, as red clover can fix up to 250kg N per hectare per year.

Comparison of nutritional value of average grass and red clover silage

	Average grass silage	Average red clover silage
DM %	34.8	25-30
D-value %	66	60-70
ME (MJ/kg DM)	10.6	9.8-11.4
CP %	13.8	14-19
pH	4.6	4.0-4.5
Ammonia (% N of total N)	8.8	<5

Source: ADAS and IBERS

Red clover needs careful management as it grows from a crown just above ground level, poor management will lead to this crown being damaged and subsequently dying out quicker. The crop is very sensitive to compaction, so excess wheelings from heavy machinery should be avoided.

Red clover should be cut in late bud stage for high protein content or when the clover is in early bloom for lower protein content. Remember to leave slightly higher aftermaths (6-8cm) than with a grass ley. Do not use a conditioner, leave in wide swaths and do not ted to reduce leaf shatter. Wilt for up to 48 hours with the aim to ensile at 30% dry matter (DM). Research has shown that as much as 5% of protein is lost with every turning where DM levels are above 30% DM.

Red clover has a high buffering capacity, which means it can be more difficult for the desired pH drop to be reached, so fermentation in bales or the clamp can be challenging. It is recommended that a homofermentative inoculant should be used for red clover silage as they improve the speed of pH decline and reduce protein breakdown. To be effective, one million bacteria per gram of fresh forage must be applied.

AHDB Dairy has produced a [Silage Additive Guide](#), which gives more information on the use of silage additives



Red clover silage image provided by Germinal

For more information download our BRP manuals [Managing clover for Better Returns](#) and [Managing grass silage for Better Returns](#)