

Mating sheep on red clover swards

Context

Red clover contains phyto-oestrogens which mimic oestrogen. Research conducted in the 1960s and 1970s in the southern hemisphere on pure clover swards found that phyto-oestrogens adversely affect ewe fertility. Industry advisers, including vets and grassland consultants, advise livestock producers not to allow breeding ewes to graze on leys that contain red clover before or during tupping, or for more than a few months.

As long as this guidance remains unchallenged, the use of red clover enriched swards is restricted to non-breeding livestock for extensive periods of the grazing season. This limits the practical use of legumes and discourages sheep farmers from using red clover in their grass leys. Thus, the benefits of red clovers, such as drought tolerance, nitrogen fixation, and improved soil structure, are lost.

Take home messages

- Since this study did not show a negative effect on ewe fertility, it could have huge economic and environmental benefits.
- The application of agroecological farming practices should give farmers greater confidence and lead them to integrate red clover into grazing swards, which in turn should reduce their input costs, reduce their carbon footprint, and improve farm sustainability.
- If red clover is to be incorporated into a grass sward without adversely affecting ewe fertility, further work will be necessary to determine whether there is an

Trial design

The field lab involved selecting a group of ewes for the trial and splitting them into two halves. One half was grazed on grass leys with no red clover, and the other was grazed on herbal leys containing the legume.

Most triallists had already established red clover on farm, but one introduced it as a new sward in Summer 2021. On average the ewes in the control group scanned at 170%, while the ewes mated on swards containing red clover scanned at 181%.



Walking the ewes to be scanned

Findings

Ewes that grazed leys containing red clover had a higher scanning percentage than ewes that grazed non-red clover leys.

It is thought that the groups of breeding ewes which grazed the red clover swards achieved a higher scanning percentage due to improved availability and quality of forage before and during the mating period.

There was no negative effect on ewe fertility at 3 of the 4 sites.

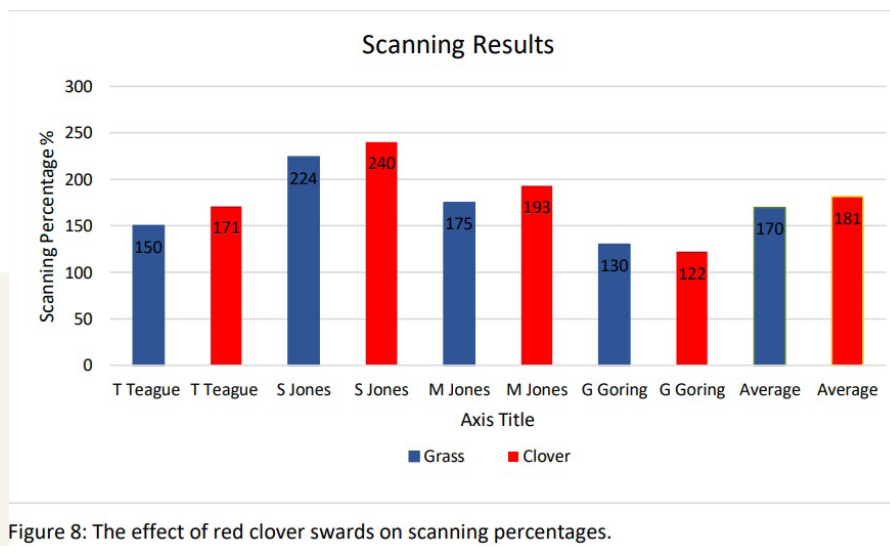


Figure 8: The effect of red clover swards on scanning percentages.

Recommendations & next steps

Introduce on a small scale initially and re-research the species suitable for your farm and soil type.

Define the main objective and do not try to test too many things at once.

Try to control other management so that any differences between treatments can be reliably attributed.

Ideally repeat the trial for more than one year.

Have a trial plan/protocol in place if several farms are taking part to standardise methods.

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Farmer comment

We've been able to prove that growing red clover alongside other herbs and legumes does have higher digestibility for the ewes, without impacting pregnancy scanning rates.

We do different tests and trials every year but putting some figures to it with research done on real farms makes a huge difference.

Marc Jones, triallist and sheep farmer