

## OESTROGENIC CLOVERS GOOD CLOVER VS BAD CLOVER

There are good clovers and bad clovers! Good clovers are a delicious and nutritious snack for your sheep. However bad clovers (oestrogenic) can cause reduced fertility in your flock and potentially lead to infertility if left unchecked.

Oestrogenic clovers usually aren't detected until landholders see reduced fertility rates in their flocks and start looking for possible causes.

***Have you got oestrogenic clovers on your property?  
Do you know how to tell?***

***“Oestrogenic clovers can significantly reduce fertility in your sheep flock by reducing ovulation and fertilisation rates. Permanent infertility can occur if ewes are exposed to oestrogenic clovers over multiple seasons.”***

### Background

After posing a significant problem for sheep producers in the 60s and 70s oestrogenic clovers have basically been unheard of in the last two decades. Recent discoveries of the clovers throughout South Australia have confirmed them as a re-emerging threat and led to a new push in producer awareness and upskilling.

There is broad concern that new generation farmers may be less aware of this potential risk, which can pose a real threat to lambing operations.

Many pastures sown down during the days after World War II, such as Yarloop, Dwalganup, Geraldton, Tallarook and Dinninup contained oestrogenic sub clovers. These older varieties have high levels of hard seed and so persist in the soil in the longer term and can become dominant after a long cropping phase or a run of dry seasons. This has been seen in instances across the region and while newer varieties do not have these problems, many properties still have a clover base that contains a high percentage of the older varieties, particularly posing a threat for those running sheep flocks.

### Why are Oestrogenic Clovers “Bad Clovers”?

Clover varieties containing high levels of oestrogen can be a sleeping threat, particularly for sheep graziers, and are often not discovered until the damage has been done. Sub clovers can be very difficult to identify accurately and therefore they are not readily noticed until the effects on the flock has become visible through reduced lambing rates.

These particular clovers cause reduced fertility rates in ewes, and can potentially lead to infertility if left un-checked.

There are landholders across the state who in recent years have seen this “old problem” re-emerge. They have seen an enormous reduction in lambing percentages for their flocks, as a result of stock feeding on oestrogenic clovers.

In one case, a Kangaroo Island landholder reported a 65% lambing rate in his Merino flock and just 35% in his maidens. Raising alarm bells, following the initial discovery of low lambing rates, the landholder consulted with the local veterinarian who recommended further investigation. Testing discovered uterine lesions consistent with oestrogenic issues, warranting follow-up testing of pasture. Laboratory tests confirmed a diagnosis of oestrogenic pastures, and in this case ultimately the cause of reduced flock fertility.

### What can you do?

If you suspect that oestrogenic pastures are a possibility for concern on your property, you should get your pasture checked. Hay cut from affected paddocks can retain pasture toxicity and can still affect ewes, particularly if fed before and during joining. This highlights the importance of detecting this issue as quickly as possible.



Identifying varieties of clovers is not necessarily going to predict if clover is oestrogenic or at a toxic level. The most accurate measure is to get a sample of the clover tested. To test your pastures, simply take a sample from each paddock and send it onto the lab for analysis. This can often be arranged through your veterinarian.

#### Can Oestrogenic Pastures be managed?

If you have confirmed the presence of oestrogenic pastures on your property, you can then ensure you make informed decisions regarding the management of this risk. There are options for working with these pastures and reducing the impact on your flock, some suggestions include:

- Altering management regimes to eliminate herbicides that encourage clover dominance.
- Eliminating spray-topping pastures and/or consider drilling in winter feed oat to 'dilute' clover.
- Testing pasture hay for oestrogens (and if high, only use after joining).
- Introducing new varieties when sowing back to pasture (Sub-clover plants that survive a long cropping phase are also more likely to be an oestrogenic variety).
- Include an earlier maturing variety in the sowing mix to compete with oestrogenic sub-clovers.

If one of your pasture recovery strategies is to increase the sub-clover population by using the existing clover plants then you should check that they are not oestrogenic varieties.

Research indicates clover disease does not affect cattle and will only impact sheep flocks if more than 30% of their diet is oestrogenic clover. However infertility in a flock may obviously be due to a number of factors, so consult your veterinarian as a first port of call if you have any problems.

If discovered early, and managed, lambing percentages can return to averages.

#### Further Information

The MacKillop Farm Management Group Inc in conjunction with the South East Natural Resources Management Board has produced several resources, including a Fact Sheet, to assist in identifying Oestrogenic Clovers.

To access this, please visit: <http://www.mackillopgroup.com.au/pages/posts/good-clover-bad-clover-fact-sheets-194.php>



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