



Growing wool

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Alternative to mulesing

An Australian Wool Innovation Limited (AWI) project involving a team of scientists University of Adelaide is developing a non-surgical alternative to mulesing for the and control of breech flystrike in sheep.

The researchers are working on a method of treating the breech of sheep with a protein causes the wool to fall out, inhibits wool regrowth and contracts the skin. The result essentially the same as mulesing - a wool-free breech area with few skin folds.

How does it work?

This treatment involves the injection of a naturally-occurring protein just under the protein disrupts the normal structure of the skin and after a few days the wool simply out.

As the area heals, the skin tightens and shrinks, removing skin folds around the breech treatment during research has been so effective that a three to four centimetre area skin in the breech that has been treated with the new protein shrinks to a line that more than one or two millimetres wide.

The animal will therefore be less susceptible to soiling around the breech area and better protected against flystrike during its lifetime.

Another advantage of this treatment is that, unlike conventional surgical mulesing minimal disruption of the epidermis (top layer of the skin).

What are the benefits?

The new method will involve no surgery and has no side effects.

A commissioned report has estimated that, without mulesing or an alternative, flystrike would kill up to three million sheep in years when conditions were conducive to flystrike

The benefit of mulesing to Australian sheep producers is estimated to be around \$ year for every sheep mulesed, due to less deaths and more efficient production.

How is the research progressing?

AWI has invested about \$700,000 in research to develop a non-surgical alternative mulesing, including \$400,000 in the University of Adelaide project, and has committed invest at least another million dollars over the next three years. Results so far from project are promising and AWI is providing all necessary support to help make the technology available as soon as possible. However the technology is not likely to be for several years.

The technology has been proven to work in an experimental situation. The next step engineers to devise a quick and easy application method that is robust enough for lamb marking time. Field trials will then be carried out to ensure that the application is practical.

In addition, AWI is investing \$240,000 with the Department of Agriculture Western to develop a national set of mulesing guidelines, produce a training manual for mulesing workshops and implement an accreditation scheme.

At a glance...

- AWI has invested about \$700,000 to date in research to develop non-surgical alternative to mulesing, including \$400,000 on University of Adelaide protein treatment project, and has committed to invest at least another million dollars over the
- three years.
- The new treatment will remove the wool and stretch the loose
- around the breech with a result similar to mulesing.
- The benefits will be no surgery and happier, healthier sheep

See [Animal welfare](#) for more information.

- [Download Alternative to mulesing - Insight fact sheet \(PDF 61Kb\).](#)

Contact

Dr Scott Williams
Australian Wool Innovation Limited
Project Manager - Animal Health
Tel +61 3 9347 5780
Email sheephealth@woolinnovation.com.au

