

# New test will help identify viral cattle disease

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(PhysOrg.com) -- A University of Adelaide project could provide a breakthrough for a viral cattle disease costing Australian producers millions of dollars each year.

Bovine viral [diarrhoea](#) infects up to 90% of [cattle](#) herds in Australia, leading to widespread production losses and increased susceptibility to other diseases, according to researcher Sasha Lanyon.

The Animal Science Honours student based at the University's Roseworthy Campus is working on a project to develop a pooled blood test to identify herds with an active infection and target those animals shedding the virus.

"This disease infects cattle herds worldwide and there are control and eradication programs in place in various European countries, but there is very little research into bovine viral diarrhoea in Australia," Sasha says.

Spot blood test samples of 82 beef and 32 dairy herds in 2008 by the Department of Primary Industries and Resources of South Australia (PIRSA) showed that the overwhelming majority of cattle had been exposed to bovine viral diarrhoea (BVD).

The virus is spread by close contact between cattle and manifests in different ways, resulting in respiratory infections, infertility or abortion, still births, mouth ulcers and severe weight loss among cattle.

Sasha has developed a pooled testing approach by combining blood

samples from several animals in a random selection of [beef cattle](#). She is also testing bulk tank milk samples among dairy cattle.

"Testing pooled samples rather than spot tests can reduce the number of tests needed to identify the virus and, in turn, reduce the cost of testing for producers," she says. Spot tests cost in the order of \$400 (15 animals are recommended for spot testing), compared to \$24 for a one-off pooled test.

As part of her project Sasha is also looking at management practices which can increase the chances of cattle being infected with the virus.

A pestivirus vaccine is available for bovine viral diarrhoea but the 2008 PIRSA survey suggested that the vaccine was not yet widely used in South Australia.

"The risk of cattle contracting the virus can be decreased by pre-purchase testing of cattle and/or vaccination," Sasha says. "Unfortunately many farmers are not aware of the vaccine or choose not to use it."

Provided by University of Adelaide

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