

Agriculture & Investment Services Ministry for Primary Industries Manatū Ahu Matua

## Probiotics trial in lambs aiming to reduce synthetic inputs

robiotics company BioBrew Ltd will be trialling one of its flagship products during lamb weaning to see whether it reduces the need for anthelmintics (antiparasitic drugs).

BioBrew has received \$24,000 through the Ministry for Primary Industries' (MPI) Sustainable Food & Fibre Futures programme to investigate the effectiveness of using CalfBrew in treating lambs with digestive disorders. This will be incorporated with low doses of anthelmintic for stimulating natural immunity to gastrointestinal parasites.

Results will be measured through industry standards such as weight, mortality, faecal egg counts and immunological markers.

Andre Prassinos, Managing Director of BioBrew Ltd, says he hopes the study will prove as successful as a previous trial of calves in the Clutha District in 2013, which demonstrated a positive effect on animal growth rates in calves treated with a BioBrew probiotic supplement. This resulted in a 14-to-1 return on investment in milk production, and lower mortality in the herd.

"There's a significant body of research that demonstrates the effectiveness of probiotics – but they must be fresh and active," says Prassinos. "We have spent 10 years in the lab developing fresh, living probiotics tailored to the digestive needs of various animal groups. Whereas the traditional freeze-dried microbial cultures pass through at least a part of the gut before they can begin to produce a probiotic effect, our live, active microbes come in liquid form that keeps the bacteria alive, ensuring 100 percent effectiveness." The microbes in BioBrew products are selected to survive the rigours of the digestive system, including stomach acids and bile salts.

BioBrew has developed a novel method of manufacturing its probiotics in bulk. "We hope the positive outcomes of our trial with lambs will inspire farmers to reduce their dependence on anthelmintics and other synthetic inputs – which animals are starting to develop a resistance to," says Prassinos.

Steve Penno, Director Investment Programmes at MPI, says safeguarding animal health and welfare is a top priority for MPI. "Probiotics has the potential to be a safe and effective option for farmers in the care of their animals. We are pleased to be able to support this project, which will provide more information for farmers who are considering probiotics for animal health." "We hope the positive outcomes of our trial with lambs will inspire farmers to reduce their dependence on anthelmintics and other synthetic inputs – which animals are starting to develop a resistance to."

