

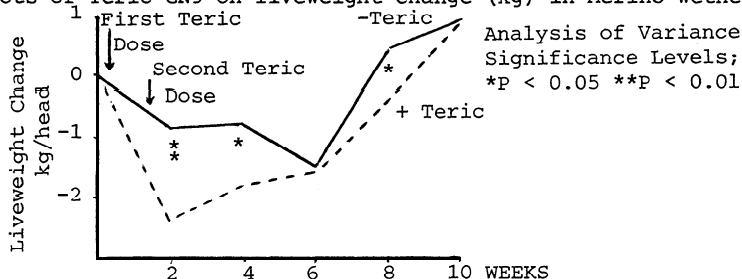
TREATMENT WITH TERIC GN9 OF LAMBS GRAZING IMPROVED PASTURES

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Studies conducted by Bird and Leng (1978) with pen fed lambs given low protein diets treated with an ionophore compound (Teric GN9; I.C.I., Melbourne) have shown that protozoa could be effectively eliminated from rumen contents and this resulted in increased lamb growth rates. A study was undertaken to assess the applicability of these results to animals grazing pastures.

A group of 14 Merino wethers (27.1 ± 0.35 kg), approximately six months old was treated with Teric GN9 to remove protozoa from the rumen. An equivalent group was not treated. Four paddocks, each 1 ha with a similar phalaris, fescue, white clover pasture, were used in the experiment. The two groups of sheep were placed on different plots and rotated every two weeks, so that each plot was spelled for two weeks to minimise the chances of re-infection. The sheep were weighed and the treated group redosed with 50 ml/head of 30% V/V Teric (GN9). All sheep were placed on the plots on 14 April, 1980. The Teric dose was repeated for the next two days. Samples of rumen fluid collected on 23 April revealed large numbers of protozoa still present, so three more doses were administered starting with 30 ml Teric/head followed by two doses of 18 ml/head at 0900 and 1600 h the next day. Rumen fluid counts on 30 May and 12 June revealed the presence of some Entodinia (about 1.2×10^4 /ml) in 11 of the 14 sheep but a complete absence of Holotrichia. The untreated animals had protozoa numbers in the order of 4.6×10^6 /ml. Animals were weighed every two weeks (Fig.1).

Fig. 1. Effects of Teric GN9 on liveweight change (kg) in Merino wethers



Both groups initially lost weight which is often typical of young sheep on green pastures in autumn on the Tablelands. Although the results can only be directly compared for a complete eight weekly grazing cycle, the initial effect of the Teric apparently increased weight loss. Some of this difference may have been caused by the extra handling of the treated group but animals were always quickly returned to pasture to reduce this effect to a minimum. Subsequent liveweight change of the treated group improved, probably due to compensatory growth, and there was no significant difference between groups at the end of the experiment.

These results show that the treatment of animals with Teric may initially depress liveweight gain but that there is no longer-term effect on animal performance. The difficulty experienced in this study of maintaining the animals at pasture free of protozoa precludes any conclusions being drawn on the effects of defaunation on sheep liveweight gains.

BIRD, S.H. and LENG, R.A. (1978). *Br.J.Nutr.* **40** : 163.

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