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A monitoring study to explore gastrointestinal helminth burdens of ewes of different fecundities in the periparturient period and effects on lamb growth rates

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HIGHLIGHTS

- Twin-bearing ewes had a significantly higher worm burden
- Single lambs had the highest DLWGs during the period from tagging to shearing
- A general trend towards increased FEC with litter size was seen in the lambs
- Recommendations for treatment of ewes in the peri-parturient period are discussed

Abstract: As a result of the periparturient relaxation of immunity (PPRI) in ewes and subsequent rise in parasite burdens it has become common for sheep farmers to worm all ewes prior to lambing. However, with increased prevalence of anthelmintic resistance it is necessary to find more sustainable worming strategies. In this study, the faecal egg counts (FECs) of untreated ewes in different fecundity groups (single-, twin- and triplet-bearing ewes) in the periparturient period, together with lamb FECs and lamb growth rates were monitored on a commercial organic lowland sheep farm in Oxfordshire, UK. Triplet-bearing ewes were supplemented with a high-protein concentrate ration and molasses prior to lambing. All ewe groups showed a relaxation in immunity against gastro-intestinal helminths from the week lambing began until eight weeks later. Twin-bearing ewes had a significantly higher overall worm burden as compared to single- and triplet-bearing ewes. Single lambs had the highest daily live weight gains (DLWGs) during the period from tagging to shearing of their mothers. Faecal egg counts of lambs were

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