

LATE PREGNANCY EWE FEEDING AND LAMB PERFORMANCE IN EARLY LIFE

2. FACTORS ASSOCIATED WITH PERINATAL LAMB MORTALITY

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ABSTRACT

Some factors affecting perinatal lamb mortality were studied with 63 Finn × Dorset Horn ewes and 85 Scottish Halfbred and Greyface ewes, having an average litter size of 2.26. Total perinatal lamb mortality averaged 29% of which 44% were stillborn, 1% attributed to dystocia, 35% died between birth and 48 h of age, 14% from 48 h to 10 days, and 5% after 10 days.

For the Finn × Dorset ewes, the 41 viable twin lambs weighed at birth 3.47 kg and 12 twin lambs which did not survive weighed 2.51 kg. Triplet weights were: viable 2.98 kg (34 lambs) and non-surviving 2.00 kg (14). Quadruplet weights were: viable 2.79 kg (12) and non-surviving 1.90 kg (16). Quintuplet and sextuplet weights were: viable 2.45 kg (2) and non-surviving 1.35 kg (14).

In the aggregated Halfbred and Greyface breeds, viable twin lambs weighed 4.5 kg at birth (91) and non-surviving 3.64 kg (11). Viable triplets weighed 3.77 kg (23) and non-surviving 2.68 kg (16).

Serum gamma-globulin and total serum protein values were lower in the lambs which failed to survive, and this was particularly marked with triplets. Fractionating the gamma-globulins (IgG) indicated that IgG₁ was particularly low in non-viable lambs.

Litter size, lamb birth weight, and colostrum intake by the lamb had important effects on perinatal lamb mortality.

INTRODUCTION

ALTHOUGH a large number of authors have worked on or reviewed the subject of perinatal lamb mortality (PLM), there is no universally adopted definition of the term. PLM is generally accepted as referring to lamb deaths up to 10 or 14 days after lambing, but some authors have extended the period to 4 weeks and others to 6 months.

PLM is an important cause for concern in the world sheep industry. Australian workers quote PLM Levels of 17.7% (Dennis and Nairn, 1970), 25 to 35% (Booth, 1972), and 20 to 25% (Watson, 1972); workers in New