

EFFECTS OF DIFFERENT PROTEIN DIETS ON EWE AND LAMB PERFORMANCE

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(Key words: Ewe, Performance, Prepartum, Protein Supplementation, Lamb Production)

Two-hundred 3 year old white face ewes were used in a study to determine the effects of protein supplements during prepartum on ewe and lamb performance under range conditions. Ewes were assigned to one of three treatment groups allotted to six pastures. Treatments were either a low (23% CP; RDP), a high protein (44% CP; RUP), or a non-supplemented control (CON) group. Five days before the expected start of lambing, ewes with twin feti, as determined by ultrasonography, were removed from their respective pastures and placed in a half section trap. Ewe production parameters studied were milk production, body condition score (BCS), and body weight. In addition, lamb weight were taken at birth (d 0) and on days 4, 14, 24, 34, 50, and 150 (weaning). Milk data were taken on days 4, 14, 24, 34, and 50 by removing the lambs, hand milking the ewes following a 1 cc i.v. injection of oxytocin,

waiting 3 hours and then hand milking again following a 1 cc i.v. injection of oxytocin. Milk volume was recorded and lambs were returned to their dams. No difference ($P > .1$) was found in milk production among the treatment groups but RDP ewes produced numerically more milk at d 50 than RUP. Lambs from the RDP group had a higher ($P < .1$) 50 d weight than RUP and CON as well as higher weaning weights ($P < .1$) than RUP and CON. No difference was found in growth rate of lambs between the RUP and CON ($P < .1$). Ewe weights were similar among the groups. Body condition scores did not differ except on d 14 when RDP had a higher ($P < .1$) BCS than RUP and CON. In summary, ewes fed a 23% protein, rumen degradable supplement during prepartum weaned more pounds of lamb than ewes fed a high protein rumen undegradable supplement or non-supplemented group during prepartum.