Prepartum grazing with oat pasture and its effect on mother-lamb behaviour at parturition

Regueiro M[1], Baldi F[2], López Mazz C[1], Banchero G[3]

[1]Facultad de Agronomía, Uruguay, [2]UNESP Sao Paulo, Brasil, [3]INIA, La Estanzuela - Colonia, Uruguay
[1]marielregueiro@gmail.com

INTRODUCTION

Nutrition during gestation has an important role at time of parturition for both mother and offspring. During the last month of pregnancy the fetus increases its requirements while the mother has a marked loss of body condition. In conditions of extensive breeding the use of improve pasture or prairies is an alternative to minimize this effect.

OBJECTIVE

The effect of different nutritional management during the last month of pregnancy on body condition (BCS), body weight (BW) and mother-lamb behaviour at parturition was evaluated

MATERIAL AND METHODS

Location: EEBR - Facultad de Agronomía - Uruguay (34°S, 57°W)
Animals: 140 multiparous Corriedale ewes pregnant with a single lamb
Nutrition: Native pasture (7% crude protein (CP) during the first four months of gestation and then assigned to differential nutritional management (regarding BW and BCS at the beginning of the treatment) during the last month of pregnancy:

i) G-O = ewes grazing oat pasture (14% CP) (n=71)

ii) G-NP = ewes fed native pasture (7% CP) (n=69)

MEASUREMENTS

At time of parturition:
In mothers: BW, BCS, duration of labor, delivery assistance and Maternal Behaviour Score (MBS, range 1-5).
In lambs: birth weight, time elapsed to stand and suck and Apgar test for newborns (score 0-10)
Statitiscal analysis: Data were analyzed using PROC MIXED and GENMOD of SAS, (mean±SEM; $p \leq 0.05$).

RESULTS

	MOTHERS					LAMBS			
Treatment	Body weight (kg)	Body conditon (score 1-5)	Duration of labor (minutes)	Delivery assistance (%)	Maternal behaviour (score 1-5)	Birth weight (kg)	Time elapsed to stand (minutes)	Time elapsed to suck (minutes)	Apgar test (score 0-10)
G-O	56.7±0.8^{a}	3.7±0.04^{a}	32.5±4.7^{a}	22.5^{a}	4.3±0.09^{a}	4.8±0.07^{a}	36.4±4.2^{a}	56.4±5.2^{a}	9.3±0.1^{a}
G-NP	52.7±0.7^{b}	3.4±0.06^{b}	24.0±3.4^{b}	4.3^{b}	4.2±0.09^{a}	4.3±0.09^{b}	28.5±3.9^{b}	51.5±4.9 ^{b}	9.1±0.1^{b}

Differences at parturition between mothers fed with oat (G-O) or native pasture (G-NP) during the last month of pregnancy (mean±SEM), and differences between their lambs. Means with different letters (a,b) in the same column are statistically different *($p \leq 0.05$)*

CONCLUSION

Higher percentage of birth assistance in GO ewes suggests that the benefit of a greater weight at birth can be exploited only if control of parturition is performed. However, grazing oat pasture during prepartum should be an alternative to be used with twin bearing ewes since lambs are usually lighter and have less vigor than single ones.