

“EVALUATION OF LIVE WEIGHT IN HAMPSHIRE DOWN LAMBS BY ARTIFICIAL INSEMINATION IN THE QUILAHUANI DISTRICT, CANDARAVE PROVINCE, TACNA REGION”

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INTRODUCTION

The production of domestic sheep has economic, social and ecological importance for man, as it is a cosmopolitan, versatile animal species that adapts to different environments, so it is necessary to know the live weight at birth weaning and the live weight gain in Hampshire Down lambs, by artificial insemination according to sex, type of delivery in the district of Quilahuani, province of Candarave, since the productive indicators allow to estimate the economic merit and evaluate the technical work carried out in a flock.

MATERIALS AND METHODS

With 95 Hampshire Down lambs (PPC) by artificial insemination, from producers in the district of Quilahuani, the municipality provided the breeders, keeping a record with: date of birth, weight at birth and at weaning (90 days fasting), type of delivery (single, double or triple), sex (female or male). Duly earmarked for weight control, the digital scale (personal scale 2003B) was used. The data adjustment was made, of the lambs born on different days and with different weights, the daily weight gain, applying the adjustment formula at 90 days according to (Crempien, 1984).

RESULTS AND DISCUSSION

The PV in males is higher than that of females, it coincides with the data of (Flores, 2013), which records 5.0 kg of PV at birth on average in lambs and weaning at 60 days an average weight of 20.0 kg. (Cruz, 2006) a PV at birth of Hampshire offspring of 3.70 kg and at weaning a PV of 21.50 kg.

The type of delivery influences the LW at birth, such as single birth (S), double birth (D) and triple birth (T). Coinciding with (Montes, et al 2018) in Colombian Creole lambs with single birth 3.1 kg, multiple birth 2.8 kg. It

Sex	n	BIRTH		WEANING (90 days; adjusted weight)	
		AVERAGE ± SD	RANGE	AVERAGE ± SD	RANGE
Male	47	4.99 ± 1.09a	3 – 8	30.85 ± 7.16a	12.43-44.93
Female	48	4.91 ± 1.10a	3.25-6.80	30.50 ± 7.75a	15.17-48.82
Average		4.91 ± 1.10	30.67 ± 7.46		

Table 1: Average live weight at birth and weaning in male and female lambs of the Hampshire Down breed. NS= Not significant because the F test 0.72 is greater than alpha 0.05 (Birth) NS= Not significant because the F test 0.81 is greater than alpha 0.05 (Weaning)

BIRTH	n	BIRTH		WEANING	
		AVERAGE ± DS	RANGE	AVERAGE ± DS	RANGE
Simple	15	6.03 ± 1.20a	3.80-8.00	35.37 ± 8.09a	16.59 -48.82
Double	59	5.02 ± 0.88 ^b	3.25-6.80	31.38 ± 5.69b	18.35-44.93
Triple	21	3.98 ± 0.73 ^c	2.50-5.20	25.32 ± 8.70c	12.43-44.07
Average		4.95 ± 0.85	30.67 ± 6.58		

Table 2: Average live weight at birth and weaning in single birth, double birth and triple birth in Hampshire Down lambs

Highly significant to the F test 0.001 because it is less than α 0.05 (Birth)

Highly significant to the F test 0.001 because it is less than α 0.05 (Weaning)

also occurs in LW at weaning as (Depaz, 2001) reports SW 12.45 kg, DW 11.75 kg and TW 11.57 kg, (Montes, et al., 2018) at single birth 12 kg and multiple birth 13 kg we assume the difference to the genetic factor of the animals.

AVERAGE DAILY GAIN (ADG) IN LIVE WEIGHT IN LAMBS

The GMD, according to the applied formula of (Crempien, 1984). The results are within the productive parameters reported, (Caravaca, et al., 2005) has a range of 250 – 350 g/day. Thus

(Castellaro, et al., 2016) states the GMD of PV in Suffolk breed lambs of 259 g/day.

CONCLUSIONS

According to the results by sex; at birth and weaning, males have a higher live weight than females, due to the type of delivery; at birth and weaning, those from single birth have a higher live weight than those from double and triple birth and in the average daily live weight gain (g), males showed a higher gain than females.

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