

## GROWTH OF WEST AFRICAN SHEEP WEANED AT TWO DIFFERENT AGES

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This study was made to investigate the effect on growth of weaning West African sheep at 56 or 84 days old, which were fed with hay and concentrate to appetite. The liveweight gains obtained to 20 weeks were  $93 \pm 15$  g/d and were not affected by the age of weaning.

**Key words:** Tropical sheep, weaning age, lamb growth

Milk production in tropical sheep is poor and rapidly drops after lambing (Butterworth 1968; Combellas 1974; Rondon et al 1976). The poor milk production means that the lamb must consume other feedstuffs within a few weeks of birth. Early weaning means that parasite contamination of the lamb can be reduced, the ewe is able to conceive earlier and flock management is eased, however the health and normal growth of the lamb must not be compromised.

In temperate breeds of sheep, lambs weaned between 42 and 126 days have grown only slightly less rapidly than those weaned in the normal manner (Hinds et al 1960; Lewis et al 1960; Pretorius 1966; Yalcin et al 1969; Bhat et al 1978). There is, however, little information on the performance of tropical breeds. In sheep of the Tabasco breed from Mexico, Castillo et al (1973) have shown that the best weaning age is between 75 and 90 days of age.

This present trial was undertaken to compare the effect of two ages of weaning on the growth after weaning of lambs of the West African breed.

### Materials and Methods

Fifty adult sheep of the West African breed which lambled single offspring were used. The sheep grazed Bermuda grass (*Cynodon dactylon*) supplemented with minerals throughout gestation until two weeks before lambing when they were confined with hay of *Cenchrus ciliaris* with 0.5 kg/d of concentrate containing 20% crude protein until weaning their lambs. When they were confined the animals were deparasitized with Thibenzoline and vaccinated with Sintomix against blackleg, malignant oedema and haemorrhagic septicaemia. After lambing the animals were weighed and put with their lambs in individual pens for two weeks. Following this the animals were moved to partly roofed pens, were weighed weekly until weaning and deparasitized monthly with Neguvon.

The sheep were allocated at random to two groups. The first group of lambs was weaned at 56 days and the second at 84 days old. From the third week of age the lambs had access to a creep feed (Table 1) and the same hay as their dams.

At weaning the lambs were restrained in partly roofed pens and fed with *Cenchrus ciliaris* hay and starter concentrate (Table 1) to appetite, until 20 weeks old.

Lambs were weighed at weaning and weekly until the end of the trial.

Table 1:

Chemical composition of starter concentrate mix

Dry matter (%)	94.1
Crude protein (%)	29
Crude fibre (%)	4.6
Crude fat (%)	4.1
Ash (%)	14.4
N F E (%)	47.9

Materials used: 41% sesame meal; 35% maize residues;  
 .. 10% meat meal ; 5% wheat bran ;  
 5% minerals ; 4% milk powder .

## Results and Discussion

There were no significant differences between lambs weaned at 56 and 84 days for weight at birth, 8, 12 or 20 weeks of age (Table 2). Similar results were obtained by Yalcin et al (1969) in which no differences were obtained between temperate lambs weaned at 60 or 75 days of age. The work of Pretorius (1966), weaning of lambs at 56, 112 and 168 days, found reduced growth in the lambs weaned at 56 days but only for the first two weeks after weaning. In the current work weaning weight was lower at 56 days but there was a quick recovery to similar weights by 20 weeks (Figure 1). The similarity of weight gains between the group weaned at 56 and 84 days could be attributed to the low milk production which has been seen in this breed from the 8th week of lactation (Combellas 1980).

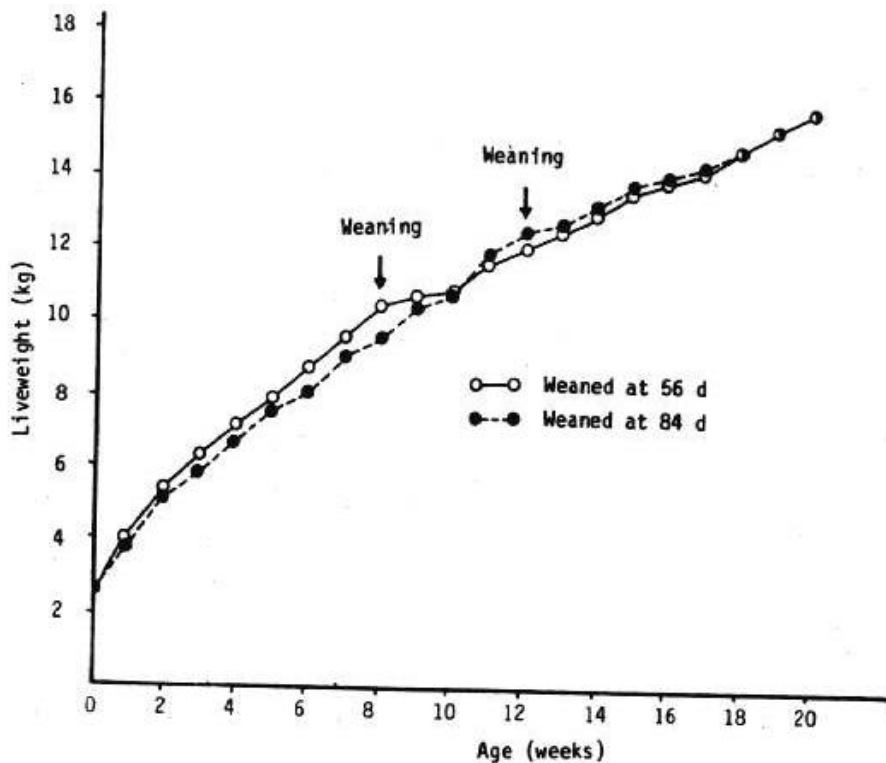
Table 2:

Lamb weight (kg) at birth and at 8, 12 & 20 weeks of age

Age at weaning	Birthweight	Age (weeks)		
		8	12	20
56 days	2.8	10.5	12.0	15.8
84 days	2.8	9.5	12.4	15.8
SE <sub>x</sub>	0.15 NS	0.48 NS	0.55 NS	0.64 NS

Daily weight gain  $93 \pm 15$  g from birth to 20 weeks old.

Figure 1:  
Growth curve of lambs



The absence of negative effects of weaning at 8 weeks of age is advantageous in that the lactational anoestrous reported by some workers could be reduced (Mauleon and Danzier 1965; Morag and Eyal 1971) and the risk of parasite contamination of the lambs is also lessened.

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Received 1 April 1981

*Translated from the Spanish*