

Lamb Trial Summary: Spring 2021

Objective: To generate lamb performance data for lambs reared on Lamlac® milk replacer (24% crude protein, 24% fat).

Trial Sites:	Harper Adams University (Newport, England)
Breed	Suffolk Mule ewe x Texel tup
Number of Lambs	20 lambs
Feeder Type	Ewe2 Thermostatically controlled bucket feeder
Body Weight Measurements	Weekly
Milk Temperature	Started at 25°C – once all lambs had been trained to suckle, temperature was reduced gradually (2°C every 2 days) to 15°C until weaning

Feed:

Colostrum:

- Lambs were left with their dam until 24 hours of age. Lambs were supplementary fed fresh or stored colostrum (50ml per kg birthweight) via a bottle and teat (for lambs that didn't suck, colostrum was given by tube).

Milk Replacer:

- Lamlac® mixed at 200g powder + 800ml water = 1 litre of mixed milk (200g per litre of mixed milk)
- Fed on restricted warm milk from 24 hours of age until trained to feed from Ewe-2 feeder
- Once trained onto the Ewe-2 feeder, Lamlac® was provided ad-libitum

Water and Dry Feed:

- Fresh water, creep and forage (haylage offered in hay racks) was available ad-libitum from day 7

Target Weights

Weaning:

- Lambs weaned abruptly at 35 days of age
- Target weight was a minimum of 10kg, and eating at least 250g creep per day

Slaughter:

- Target weight was 42kg at 12 to 16 weeks (maximum 20 weeks) of age

Results

Growth Rate:

- All lambs weighed at least 10kg at weaning, ranging from 12kg to 23kg, with an average body weight of 16.9kg (Table 1).
- The average daily live weight gain up to weaning was 0.34kg/d (range 0.23 to 0.48kg/d).

Milk Intake:

- Lambs consumed on average 2.1 litres milk per day up to weaning, with a mean total intake of 73.7 litres. Total milk powder intake per lamb was approximately 14.7kg (based on average total intake and a mixing rate of 200g/L).

Table 1. Body weight (kg) from birth to weaning at 5 weeks of age

Age, days	Mean	Min	Max
Birth	4.33	2.7	6.1
7	5.93	4.0	8.2
14	8.42	5.8	11.1
21	11.17	7.9	15.0
28	13.61	9.7	18.7
35 (weaning)	16.90	11.9	23.0

Slaughter Weights:

- At slaughter, lambs weighed on average 49kg, at a mean age of 131 days (19 weeks)

Table 2. Body weight (kg) at slaughter

	Mean	Minimum	Maximum
Slaughter weight, kg	49	41	57.5
Age, days	130.5	113	143
Days from weaning	92.3	79	104

Conclusion:

- Lamb performance was good, with lambs achieving body weights of on average 17kg at weaning (35 days) and 49kg at slaughter (19 weeks).
- With good farm practices, lambs can be successfully reared artificially on Lamlac® helping to maximise the number of lambs reared in flocks with a high prolificacy rate

