

## S U M M A R Y

This study was carried out over one full year (July, 1980 to June 1981) utilizing two farms of sheep. Farms were an experimental one of 146 Barki ewes raised on Maryout Experimental Station and a commercial one of 148 ewes of the same breed kept at the Nile Agricultural company Limited (NADCO) in a newly reclaimed area west of Noubaria. The distance between both localities is about 45 km.

Estimates of feed consumed and lambs produced were recorded. The main results could be summarized as follows:-

- 1) Average livebody weight of ewes of the experimental and commercial farms were 35.1 and 39.5 kg. at the start of the breeding season, respectively. Weight gains over the 51 day mating period were 6.7 and 0.2 kg. for ewes of the experimental and commercial farms , respectively. Corresponding weight gains from mating to just before lambing were 8.0 and 2.7 kg, respectively.
- 2) Averages of conception rate were 82.2 and 61.4% for the experimental and commercial farms , respectively, with corresponding lambing rates of 81.5 and 66.9%, respectively.

- 3) Number of lambs weaned as percentages of ewes joined were 71.23 and 61.49% for the experimental and commercial farms , respectively.
- 4) The overall mean of birth weight of lambs was 3.42 kg. with no significant difference between both farms.
- 5) The overall mean of weaning weight of lambs at 4 month of age was 19.91.kg. with a significant difference ( $P < 0.01$ ) of 3.36 kg. between both farms, in favour of the experimental one.
- 6) Daily gain of lambs were 150, 142 gm. from birth to weaning, 67, 63 gm. from weaning to 6 months of age and 123, 103 gm. from birth to 6 months of age, in the experimental and commercial farms , respectively.  
Differences in growth rate of lambs between experimental and commercial farms were significant ( $P < 0.01$ ) apart from than 4 to 6 months of age.
- 7) Weights of lambs at 6 month of age were 25.55 and 21.95 kg. for the experimental and commercial farms,, respectively, and that the difference was significant ( $P < 0.01$ ).
- 8) Average of feed intake per ewe was 394.83 and 357.46 kg. DM for the experimental and commercial farms , respectively, over the experimental period (12 months).
- 9) In the experimental farm 22.7 kg DM. was needed to produce 1 kg of lambs. The corresponding value for the commercial one was 27.0 kg.

10- In the experimental farm 47.08 or 24.86 kg DM and TDN respectively were needed to produce one kg. carcass. Corresponding values for the commercial one were 55.99 or 19.36 kg.

Results were discussed and recommendations to improve 'BEMP' for local Barki sheep were put forward.

On the average, each unit (ewe + lamb) consumed 449.60 and 402.96 kg. dry matter for the experimental and commercial farms respectively, out of which 394.83 and 357.46 kg. for the ewe and 54.87 and 45.50 kg. for the lamb, respectively.