

INTRODUCTION

In the year 1958 Trinidad imported 824,420 lbs. of frozen mutton and lamb the value of which was \$329,261 (B.W.I.). Wilson (1958) has estimated that this amount of meat could be produced from 20,000 breeding ewes kept on 5,000 acres of good pasture. However figures available for 1957 show that only 1,891 sheep were being maintained on the island. If an attempt is to be made to increase the mutton production of Trinidad it is important to find a suitable breed of sheep which will live and produce under local conditions.

The Blackhead Persian breed (Ovis aries steatopyga, Lyddeker 1912) is an introduced breed on which work is being carried out. The breed is a member of the fat rumped sheep indigenous to N. Africa and Asia Minor (Duerden[&] Boyd 1930). The ram is hornless and there is a strongly developed dewlap which extends down the chest. The tail is short, appearing as a knob between the two fatty cushions on the rump. The head is black, the remainder of the body being white. Due to its slender legs and the replacement of fleece by hair the breed thrives well in bush country surviving on scanty vegetation and in quite long droughts. When in tick-infested areas dipping is easy and efficient. Blowfly attack never occurs. In its native areas early maturity and prolificacy are the breed's chief assets while its main disadvantage is poor fat distribution within and over its muscles.

Work aimed at assessing the milking capacity of the ewes of the breed has been carried out by Watney (1958) and Craven & Macartney (1959) at the Imperial College. Previous studies on the temperate breeds have shown the value of good milk production over the first three weeks of a lamb's life when it is entirely dependent on the ewe

for nutrition. This good early milk yield will promote easy growth and hence better mutton qualities in the lambs due to rapid early development. Up to the twelfth week of lactation it has been shown that milk yield has a profound effect on the eventual value of the lamb.

ii. To study the effect of differing planes of nutrition on

The present study was aimed at continuing the investigation of milk yields of the ewes. Combined with this was a simple two level nutrition trial to compare milk production on high and low planes of feeding and hence the effect on the liveweight gains of the lambs.

iii. To study the effect of milk intake on the liveweight gain of lambs.

iv. To study various factors affecting milk yield of the ewes.

v. To study factors, other than milk intake, affecting liveweight gain of lambs.