

I. INTRODUCTION

In Egypt, there is an increasing demand for beef (red meat) due to the steadily increase in the population number and living standards.

The gap between the local beef production and the demand is widening calling for more efforts to increase and develop beef production. Shortage of feed supply particularly during the summer season may be the major constraint to further increase in animal products.

Many workers tried to increase feed supply through increasing the yield of green herbage by inter-seeding Egyptian clover with suitable grasses as a partial solution for the shortage of feeds (Ghoneim, 1964 and Abou-Raya et al., 1965). Also, other workers (Ghoneim, 1964, Hathout, 1966) suggested the use of some unconventional farm by-products, such as corn cobs, corn stover and corn stalks or by-products after chemical treatments (Abou-Raya et al., 1973) in ruminant feeding.

Recently, during the last few years, two summer forage crops namely Napier grass (Pennisetum purpureum) and Sordan grass (A hybrid of sorghum bicolor and Sorghum

Sudanese) have been introduced to Egypt as potential high productive forage crops and high feeding value. These summer forages beside the traditional maize forage (*Zea mays* which is called Darawa) were used in the present study to investigate the effect of feeding different summer forages along with different levels of concentrates on the performance of growing calves in two experiments.

In addition, digestibility trials using Friesian male calves were carried out for the nutritional evaluation of the rations used in the feeding trials and the carcass traits were also investigated.