

I. INTRODUCTION

The shortage of dietary animal protein in Egypt, is a clear reflection of several well known factors . One of these factors is the great competition between man and animal on the limited land productivity. Hence, there is a shortage in available feedstuffs to cover the animal requirements all year round.

In winter, there are adequate quantities of clover, which is considered as the main feed for farm animals in Egypt, usually it covers the requirements of animals. In summer time however, there is an acute shortage of feedstuffs. This situation is created by this scarcity of summer forages and the limited availability of concentrates.

Recently, several attempts were made to solve the problem of feed shortage in summer. Many kinds of grass were examined for use as animal feeds ; Elephant grass is one of them. Makky (1976) reported that elephant(Napier) grass is one of the most promising summer forages to be introduced under the Egyptian pattern of agriculture. He emphasized that this grass can give 5 to 6 cuts during the summer period with a green forage yield of over 100 tons. It was proposed to utilize Napier (elephant) grass in feeding cattle in summer time trying to maximize its consumption and utilize minimum amount of concentrate .

(2)

Accordingly, it appears necessary to study the effect of feeding Napier (elephant) grass alone or with concentrate mixture. It seems also important to undertake comparative feeding experiments with concentrate mixture alone.

This study is an attempt to determine the digestibility coefficient and the feeding value of Napier (elephant) grass alone or with concentrate mixture as compared to concentrate mixture with rice straw in fattening local calves. Weight gain, body weight changes, efficiency of feed utilization for fattening and some other measurement criteria were also investigated.
