INTRODUCTION

Buffalo have recently evoked a wide-scientific interest as a promissing potential animal capable of providing milk and meat. This animal is regarded as the future animal in many areas of the world, espaecially in Europe where the Cow Madness (CMD) and the Foot and Mouth Disease (FMD) have spread epidemically during the last few years.

In Egypt, buffalo occupy a prominent position in animal production industry. They account for 65-70 % and 40-45 % of the total national milk and meat production, respectivly. Buffalo are also endowed by nature with enormous characteristic advantages. They can efficiently consume the cheap low quality feedstuffs and farm by-products and convert them into protein of high biological value. They are also characterized by a lower rate of management expenses and production costs than that in Bos taurus cattle.

The exceptional characteristic nature of buffalo milk due to its fat content (6-8 %); and SNF (10-12 %) makes it highly suitable for consumption as liquid or for making dairy products. The increased dressing percentage of buffalo milk when cream chease, butter or yogurt are made, has been considered as an additional economic advantage. It is estimated that 1kg of cream cheese takes only 2.8-3.2 kg of buffalo milk vs 5.0-5.5 kg of Friesian cow milk. The corresponding dressing persentages when butter is to be made are 20 % vs 10 %, respectively. Moreover, Buffalo can also produce high quality lean meat of lower cholesterol content than that produced by other farm animal

The ablity of buffalo to thrive under a wide varity of environments, their resistance to many infections and parasitic diseases and most importantly their highly adaptive ablity to the sub-tropical climate of Egypt are additonal merits of important consideration.

The statistics of CAPMS, (1990) indicated that buffalo contribute 40 % (LE 2 bllion) of the total value of animal production Egypt.

Despit their well-documented advantages, Buffalo have long been accused to have low reproductive capacity. The long period of anestrus, estrous cycles, days open and increased number of services/conception are the common reproductive phenomina traditionally stuck with buffalo. These reproductive features certainly result in too long calving interval, which is the main reproductive parameter ordinarily, used to judge upon the reproductive efficiency of farm animals. These retarded reproductive criteria were frequently attributed to either, inherent reproductive dysfunction or to the poor management practices (basically poor heat detection programms and inappropriate levels of feeding.

Many workers have also attributed the unsatisfactory reproductive performance of buffalo to the possible impacts of the high incidence of quiet ovulations (Barkawi, 1984) as well as to season of the year (EI-Fouly, et al., 1976 and Abul-Ela (1988).

It is the author's concept that neither the quiet ovulations nor the season of the year are the main resons impacting reproductivity in buffalo. Nevertheless, conclusive evidence has been accomulation that major improvement in the reproductive efficiency of Egyptian buffalo could be achived through a strict management policy, including the aspects of nutrition, health care, housing, efficient heat detection, appropriate time of breeding and efficient theriogenological practices.

The present study aimed at the evalution of the reproductive performance of 32 pluriparous buffalo cows through a period of approximately one -year. Heat detection was conducted along the 24- hours of the day using a TV closed - circuit. The distribution of heats along the different parts of the day was calculated and the estrous signs were described. In addation, the impact of time of breeding and season of calving were also scruteinized. Blood progesterone profiles were used to confirm the obtained results.