PRODUCTION PERFORMANCE OF EMU BREEDERS

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ABSTRACT

The present study was undertaken to assess the production performance of Emu breeders maintained in pair mating under semi intensive system during 2007-08 and 2008-09 laying seasons by adopting normal feeding management system on pilot basis. The mean number of eggs during 2007-08 and 2008-09 laying period was 69.8 and 147.25 days respectively. The mean egg production per bird in 2007-08 was 19.4 eggs and in 2008-09 were 40.5 eggs. The highest egg production per bird was 27 and 48 in 2007-08 and 2008-09 laying season. The best egg producer in the unit laid 48 eggs in a laying period of 177 days attaining a frequency of one egg in every 3.5 days. The mean Emu egg weight during the study period was 566.63±9.06 g.

KEY WORDS: semi intensive system, laying season, egg weight, Emu breeders

INTRODUCTION

Emu (Dromaius novehollandiae) belongs to an ancient group of flightless birds known as ratites, which also includes cassowary, kiwi, ostrich and rhea. Emu birds were introduced in India for commercial value of meat, oil and skin. In the recent years number of farmers and entrepreneurs are coming forward to rear Emu birds in and around urban and semi-urban areas to augment their income through Emu farming. Emu rearing do not require prime farm land. Marginal land not suited for crops can be utilized for this purpose. However there are no scientific studies reported in organized Emu farm. Hence this study was taken-up to document the production performance of Emu breeders.

MATERIALS AND METHODS

The Emu research unit at TANUVAS Regional Research Center, Pudukkottai, contained 5 breeding pairs aged about 6 years. Their performance was studied in terms of number of eggs produced, season of laying and egg weight. The eggs produced per bird were recorded daily in the laying season from 2007-08 to 2008- 09. The eggs were collected soon after laying in the evening at 5.30 to 6.30 pm and the egg shell surface was cleaned with a cotton swab. The eggs were marked with pen number and serial number of egg after collection and were weighed. The eggs were stored for 2-3 days at room temperature and loaded in the incubator as soon as 3 eggs were received. The date of receiving the first egg in the pair to the last egg laid in the pair was considered as the laying season for each year under study. Similarly for each individual hen, the length of laying period was measured from the date of laying of the first egg in the season to last egg laid by that bird.

RESULTS AND DISSCUSION

The total egg production from 5 hens during 2007-08 and 2008-09 was 97 and 162 respectively. The average egg production per bird in 2007-08 was 19.4 eggs and in 2008-09 (excluding one non layer) was 40.5 eggs. The laying season extended to 99 days during 2007-08 and to 177 days during 2008-09. The highest egg production of an individual hen recorded during 2007- 08 and 2008- 09 was 27 and 48 respectively. Among five female birds in the breeding pair, two hens in both the seasons produced higher than the average egg production of the breeding pair. The best

egg producer in the pair laid 48 eggs in a laying period of 177 days attaining a frequency of one egg in every 3.5 days. The egg production in a season ranged from 6 - 27 eggs with a laying period of 28 to 99 days during 2007- 08. The range of egg production was 33- 48 with a laying period of 115 to 177 days for individual hens during the year 2008-09.The numbers of eggs produced per bird per year was slightly higher in 2008-09 (162 eggs) than in 2007-08 (97 eggs). This might be attributed to environment, physiology, age and certain management factors related to egg production of Emu hens during egg production. The mean egg production per bird (40.5 eggs) was better with extended laying period of 177 days in 2008-09 than in 2007-08 (19.4 eggs in 99 days). Minnaar and Minnaar (1993) and Jeffery (2001) reported that Emu laid 40 to 50 eggs/hen/year. While slightly lower egg production per hen of 18.7 and 18.2, during first and second laying season respectively was reported by Rao et al. (2005). One of the reasons for this higher egg production may be due to age of the birds. Scientific information is not available on pattern of egg production in different laying years in productive life of Emu hens. However it can be presumed that with increasing age Emu birds tend to lay more number of eggs during productive years. It was observed that with increasing age laying season got extended resulting in increased egg production. The breeding season extended from October to March at Emu Research Unit, in the two years under study. This was in agreement with the reports of Davis (1997)

The minimum and maximum egg weights recorded were 515 and 600g respectively at laying. Considerable variation in egg weight was observed between eggs laid by the same hen and also between different hens. The mean egg weight recorded during the season was 566.63± 9.06 g at laying. This was in agreement with that of the reports of Manezes et al. (2001) who reported normally Emu egg weight were 550 to 600 g. Before setting i.e. three days after laying the minimum and maximum egg weights recorded were 513 and 600 g respectively. The mean egg weight recorded during the year was 565.72±9.10 g before setting. While slightly higher values (625.5 to 627 g) were reported by Minnaar and Minnaar (1993). In general the Emu eggs were half of the size of the ostrich egg Ipek and Sahan (2002).

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