

**A PILOT STUDY ON PRODUCTION  
PERFORMANCE OF EMU BIRDS  
(*Dromaius novaehollandiae*)**



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*Thesis submitted in partial fulfillment of the  
requirements for the degree of*

**MASTER OF VETERINARY SCIENCE**  
**in**  
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*to the*  
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**TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY**

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**CERTIFICATE**

**Name**  
This is to certify that the thesis entitled "A PILOT STUDY ON PRODUCTION PERFORMANCE OF EMU BIRDS (*Dromaius novaehollandiae*)" submitted in partial fulfillment of the requirements for the degree of **MASTER OF VETERINARY SCIENCE** in **LIVESTOCK PRODUCTION AND MANAGEMENT** to the Tamil Nadu Veterinary And Animal Sciences University, Chennai is a record of bona fide research work carried out by **V.BOOPATHI** under my supervision and guidance and that no part of this thesis has been submitted for the award of any other degree, diploma, fellowship or other similar titles or prizes and that the work has not been published in part or full in any scientific or popular journal or magazine.

Date: 12.8.2009

Place: Chennai - 7

  
(Dr. T.SIVAKUMAR)  
Chairman

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Place: Puducherry

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**APPROVED**

  
Chairman : (Dr. T.SIVAKUMAR)

  
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## ABSTRACT

<b>Title</b>	:	<b>A PILOT STUDY ON PRODUCTION PERFORMANCE OF EMU BIRDS</b>
<b>Name of student</b>	:	<b>BOOPATHI.V</b>
<b>Degree for which submitted</b>	:	M.V.Sc., Livestock Production and Management
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The present study was undertaken to assess the production performance of emu birds under normal feeding management system on pilot basis.

Six numbers of straight run one day old emu chicks were used for growth performance studies up to 3 months of age. The production performance of emu breeders maintained in pair mating under semi intensive system was evaluated during 2007-08 and 2008-09 laying seasons. A total of 164 emu eggs were collected during breeding season (2008-09) from 5 pair, out of which in 11 eggs were used for the hatching performance.

The growth performance in terms of body weight, body weight gain, feed in take and feed efficiency was recorded and reported. The mean  $\pm$  SE of body weight of emu chicks (g) at birth, 15<sup>th</sup>, 30<sup>th</sup>, 45<sup>th</sup>, 60<sup>th</sup>, 75<sup>th</sup> and 90<sup>th</sup>

day were  $405.00 \pm 13.32$ ,  $1123.71 \pm 65.76$ ,  $2427.71 \pm 88.63$ ,  $3577.14 \pm 50.01$ ,  $5160.00 \pm 104.43$ ,  $7440.14 \pm 154.12$  and  $10320.00 \pm 212.38$  respectively. The mean  $\pm$  SE of daily weight gain (g) at first 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> fortnight were  $47.91 \pm 3.67$ ,  $86.93 \pm 2.85$ ,  $76.63 \pm 3.24$ ,  $105.52 \pm 3.63$ ,  $172.01 \pm 3.32$  and  $171.00 \pm 3.94$  respectively. The mean  $\pm$  SE of daily feed intake (g) at first 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> fortnight were  $95.65 \pm 32.89$ ,  $236.36 \pm 41.30$ ,  $301.81 \pm 29.56$ ,  $327.71 \pm 41.13$ ,  $434.38 \pm 34.36$  and  $457.90 \pm 56.00$  respectively. The feed efficiency at first 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> fortnight were 2.01, 2.71, 3.93, 3.10, 2.52 and 2.66 respectively. Feed efficiency (2.01) was better during first fortnight of age compared to rest of the fortnights.

The mean number of eggs during 2007-08 and 2008-09 laying period was 80.25 and 147.25 respectively. The mean egg production per bird in 2007-08 was 22.75 eggs and in 2008-09 was 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 hatching performance of emu breeder was evaluated during the breeding season of 2008-09. The percent hatchability on total eggs and fertile eggs set were 63.3 and 63.3. The mean emu egg weight during the season was 566.63g with a dark green and rough surface (54.54 percent). The weight loss of emu eggs during incubation (1-49 days) ranged from 9.48 to 11.53 with an over all mean of 10.50% in eggs that were incubated. Moisture loss of 9.48 per cent was considered as optimum for good hatchability of emu eggs in the present study.

Key words: Body weight gain, Feed intake, Feed efficiency, Emus, Emu eggs, Egg production, Egg quality, Hatchability, Weight loss.