

## Influence of parental age on the hatching performance of color broiler breeders in Tamil Nadu, India

Premavalli K, D Balasubramanyam, D Thyagarajan, A V Omprakash and M Babu  
Tamil Nadu Veterinary and Animal Science University, India

A total of 180 color broiler birds (Nandanam Broiler-II) were randomly divided into four replicates of 45 birds (40 hen+5 cock) each and reared in deep litter system to find out the influence of parental age on hatching performance of color broiler breeders. Hatching eggs were collected, fumigated and set at every four weeks interval from 25 to 72 weeks of age. The overall mean per cent fertility, total hatchability, fertile hatchability and total embryonic mortality were  $78.20 \pm 0.39$ ,  $86.59 \pm 0.37$  and  $90.24 \pm 0.28$  and  $7.16 \pm 0.29$  percent respectively. Age of the bird exhibited a highly significant ( $p < 0.01$ ) influence on percent fertility, fertile hatchability and total embryonic mortality and significant ( $p < 0.05$ ) influence on total hatchability. Increasing trend in percent fertility was observed as the age of the bird advanced from 25 to 48 weeks and a dip in percent fertility during 49-52 weeks; then a second raise was noticed from 53 to 64 weeks, a second dip at 65-68 weeks and then a third raise was noticed at 69-72 weeks of age. Increasing trend in fertile hatchability with corresponding decrease in percent total embryonic mortality were observed as the age of the bird advanced from 29 to 68 weeks except at initial (25-28 weeks) and end of production cycle (69-72 weeks of age). Increasing trend in percent total hatchability was noticed as the age increased from 29-36; 41-48 weeks; 53-64 weeks with decreasing trend during 25-28; 37-40; 49-52 and 65-72 weeks of age. It can be concluded that hatching eggs should be collected from 29 weeks to 68 weeks of age of color broiler breeders to obtain higher fertility and hatchability performance.

### Biography

Premavalli K is currently working as an Assistant Professor at Tamil Nadu Veterinary and Animal Science University, India.

[drpremaavalli@gmail.com](mailto:drpremaavalli@gmail.com)

### Notes: