

# Reproductive Performance of Broiler Breeders Maintained on a Photo Schedule of Only Morning and Evening Artificial Light in Open-Type Houses

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### **Abstract :**

One thousand five hundred twenty female and 152 male Arbor Acres feather-sexed broiler breeders were reared together in a litter-floored house under natural daylight. Groups were housed 40 females and 4 males per pen, in 38 pens, of an open-sided litter-floored layer house. They were subjected to artificial light treatment beginning at 20 weeks of age and given 14.5 hrs of light per day, with a weekly increase of 15 min until 16 hrs of artificial light was received at 26 weeks. At 26 weeks of age, half of the pens were given only two hours of artificial light per day at 0400 to 0500 and 1900 to 2000 while the other half of the pens continued to receive 16 hrs of artificial light per day (0400-2000). Egg production, egg weight, egg specific gravity, body weight, fertility and hatchability were recorded throughout the laying period until the birds were 60 weeks of age. The results of this experiment showed that egg production, egg weight, egg specific gravity, fertility and hatchability were not significantly affected by only giving artificial light for 1 hr early in the morning and 1 hr in the evening in conjunction with natural daylight in open-type houses.

### **Key Word :**

Broiler breeder, artificial light, egg production

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