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Effect of Temperature Variation on the Incubation of Hen's Egg

Alumbusha Mishra
 Sapna Kumari
 Smriti Mishra

Rachna Sahay

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Corresponding Author : Rachna Sahay

Abstract: Temperature is the most important of all the physical factors which determine the success of incubation. This experiment was designed to see the effect of different incubation temperatures on egg hatchability and hatchling quality. Two days old fertilised hen eggs were incubated at three different temperatures. Embryo developments were examined after some interval in each group. It has been observed that at low temperature eggs showed slow development in early embryonic days and were rotten after certain period of time. Eggs kept at high temperature showed fast embryonic growth and early hatching of chick with some deformities in the

Alumbusha Mishra

B.Sc. III year, Zoology (Hons.), Session: 2016-2019, Patna Women's College, Patna University, Patna, Bihar, India

Sapna Kumari

B.Sc. III year, Zoology (Hons.), Session: 2016-2019, Patna Women's College, Patna University, Patna, Bihar, India

Smriti Mishra

B.Sc. III year, Zoology (Hons.), Session: 2016-2019, Patna Women's College, Patna University, Patna, Bihar, India

Rachna Sahay

Assistant Professor, Department of Zoology, Patna Women's College, Bailey Road, Patna–800 001, Bihar, India E-mail:shahla_apex@yahoo.co.in

hatchlings. Eggs at constant temperature of 37°C showed normal development and proper hatching. To meet the requirement of the developing embryo in the incubation period a constant temperature in between 37°C-38°C is needed.

Keywords: Temperature, Eggs, incubator, embryonic growth.

Introduction:

In recent years, the increasing use of incubators in hatching chickens for the replenishment of poultry flocks has made desirable or more complete knowledge of factors that influence hatching result.

After the eggs are laid, they will not develop until certain conditions or parameters are met. The conditions maybe: Incubation time, Incubation temperature, Humidity (Air Relative Humidity) and Egg positioning & Turning.

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