
EXPERIMENT 4 BROODING OF CHICKS

Structure

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4.1 INTRODUCTION

Rearing of young chicks from day old to two weeks of age is known as Brooding, which is carried out in a house called Brooder House. Generally, brooding is done either on the floor (deep litter system) or in battery cages meant for young chicks. During the process of brooding, optimum temperature is provided through electric bulbs or any other heat source fitted in a metallic or wooden hover (umbrella type) known as brooder. Proper ventilation, feeding, watering and personal care are also absolutely required for proper growth and development of chicks.

Objectives

After performing this experiment, you will be able to:

- arrange the brooder house to receive chicks; and
- demonstrate brooding of chicks.

4.2 EXPERIMENT

4.2.1 Principle

Brooding is extremely important because the chicks are about to learn all basic activities like feeding and drinking for the first time and they require artificial heat because there is no broody hen available to take care of them. The chicks will therefore be very sensitive and if proper care is not given, it is possible to lead to illness and/or deaths and/or poor productive performance.

4.2.2 Requirements

- Brooder house
- Brooder
- Chick Guard
- Disinfectant
- Electrical bulb holder and bulbs of different watts
- Feeder and water trough
- Litter material, paper and gunny bags

4.2.3 Procedure

- 1) In case of floor brooding, after cleaning and proper disinfection of brooder house, a particular area of the floor of brooder house is covered with litter material (saw dust or paddy husk) about two inches in depth which is further covered with paper (Fig. 4.1).



Fig. 4.1: Floor covered with litter material and paper

- 2) Subsequently, the brooder is set on this litter material which is surrounded by the chick guard.
- 3) The required number of bulbs is fitted to the brooder and electrical connection is set up.
- 4) The feeder and water troughs are arranged inside the chick guard alternatively in such a way that half of the feeder and water trough are placed inside and the remaining half is outside the brooder area (Fig. 4.2).



Fig. 4.2: Feeder and water trough arrangement inside chick guard

- 5) The initial temperature inside the brooder should be 95°F which should be subsequently reduced by 5°F every week.
- 6) Adjust the temperature inside the brooder by observing the behaviour of the chicks.
- 7) Depending on outside temperature, remove the chick guard after 3 to 4 weeks of age and spread the chicks gradually in the whole room with the arrangement of more numbers of feeders and waterers along with litter materials.
- 8) Debeaking and required vaccination should also be done during the brooding period as per the recommendations.
- 9) Remove the brooders after two to four weeks depending upon the temperature requirement.

Note: The accuracy of brooding temperature can be best judged by the movement of the chicks under the brooder. If the chicks are away from the source of light, that is the chicks are in the periphery of brooder, it indicates more temperature. Conversely, if the chicks are in huddling condition under the brooder, it indicates lower temperature (Fig. 4.3). The accurate temperature is indicated by the uniform distribution of the chicks under the brooder.

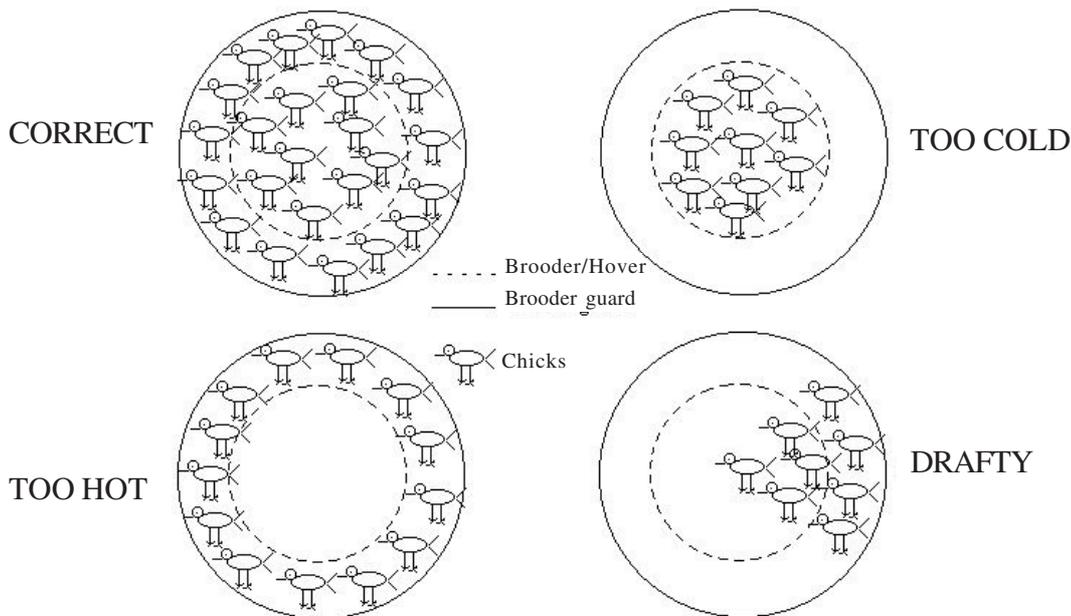


Fig. 4.3: Position of chicks in brooder area

4.2.4 Observations

- i) Record the location and distribution of feeders and drinkers.

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- ii) Record temperature of the brooder at about 3" above the litter floor.

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iii) Position of the chicks in the brooder area (inner/outer/scattered).

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4.2.5 Results

Based on the observations, give your opinion on the brooder arrangement and the condition in the brooder area.

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4.3 PRECAUTIONS

- Handle the chicks carefully during brooding as they are very delicate at this stage.
- Sick and weak chicks should be removed from the flock.
- Strict hygiene should be maintained in the brooder house.
- The feeders and waterers should be thoroughly cleaned before filling.