

Effect of Some Factors on Brooding Period

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Abstract: Brooding or cessation of egg in hens is the most important factor to bankruptcy in the hen's egg production. In order to examine brooding factors in Ardabil region of leghorn chicken breeds this study was performed in 2010 and traits such as voice of brood and normal hens, interest for sleeping on the eggs, The temperature, Loss of feathers, Number of eggs and eating times were measured. Results showed that the brood hens make very unusual sounds and are highly resistant to human behavior; also the body temperature in brood hens in most time was 5-6°C lower than normal hens. From 50 normal hens only two percent showed interest to sleeping on eggs, while 99 percent of broody hens were very interested to sleeping on eggs. Loss of feathers in normal hens was 7 percent and in brood hens was 98 percent; also number of collected eggs in normal hens in 15 days was 736 and in brood hens were only 9. According to the intense interest in the hens to eat, results showed that the normal hens in every day 4-5 times leave their Nest, but brood hens only 1-2 times did that and immediately come back on their eggs. Eventually it became clear that the best way to brooding manage, is the increasing of eggs collecting times in the nest and prevent the creation of alternative nest sites for birds on the bed.

Key words: Brooding · Hen · Ardabil · Egg

INTRODUCTION

The main objective in brooding chicks is to efficiently and economically provide a comfortable, healthy environment for growing birds [1]. The rearing of broiler chickens and laying is the best access to animal protein (meat and eggs). Production of meat and poultry industry and poultry farming broiler meat is half what is considered [2]. Brooding is a normal physiological phenomenon that in birds appear to be an instinctive mode is that it helps to perpetuate the survival. In brooding time, hens sleeping on eggs and converting that to chickens, in one year it is possible that every hen is brood for more times and it is possible that one hen don't be brood [3]. Read brooding like Larry the race is high, usually 3-2 times in the race birds are brood [4]. During the first five days of a chicken's life, the bird goes through a period in which the highest growth rate of his whole life occurs. In these first 5 days, the chicken can multiply his own body weight up to 4 times compared to the weight at day. Because of the short life cycle of the birds, the developmental and growth phase is crucial. The growth that is missed during the first 5 days of the post hatch period will not be regained later in life. Brooding

reflects the first five days of the chicken's life. A good start during these first 5 days increases the possibilities for the bird to express its genetic potential later in life. During this critical period, the bird therefore needs special care to optimize the start and further development from the moment of hatch onwards [4]. During the brooding period, important developmental and physiological processes occur. Although the bird is anatomically complete at the day of hatch, the digestive, immune and thermoregulatory systems are not fully developed. To optimize early growth and development, early feeding is essential for the stimulation and development of the digestive tract. Besides this, early feed may prevent that essential immunoglobulin of the residual yolk are used for energy instead of used as maternal antibodies. The immune system is activated and developed in the brooding period and is important for the immune competence of the chicken later in life [5]. Temperature, air quality, humidity and light are critical factors to consider. Failure to provide the adequate environment during the brooding period will reduce profitability, resulting in reduced growth and development, poorer feed conversion and increased disease, condemnation and mortality [6].

Purpose and importance brooding case study on the factors and strategies to prevent brooding took it.

MATERIALS AND METHODS

In order to examine brooding factors in Ardabil region of leghorn chicken breeds this study was performed in 2010. In this study 100 hens including 50 normal and 50 brood hens were sampled and traits such as voice of brood and normal hens, interest for sleeping on the eggs, the temperature, Loss of feathers, Number of eggs and eating times were measured. For drawing the figures Excel 2033 were used.

RESULTS AND DISCUSSION

Results showed that the brood hens make very unusual sounds and are highly resistant to human behavior; also the body temperature in brood hens in most time was 5-6°C lower those normal hens (Table 1).

From 50 normal hens only two percent showed interest to sleeping on eggs, while 99 percent of broody hens were very interest to sleeping on eggs (Table 1).

Table 1: Mean comparison of some measured traits

Traits	Non- brood hens	Brood hens
Voices	Normal for all	Abnormal sound
Interest for sleeping on the eggs	2	99
The temperature	Normal	decreased
Loss of feathers	7	98
Number of eggs (in 15 days)	736	9
Eating times	4.3	1.5

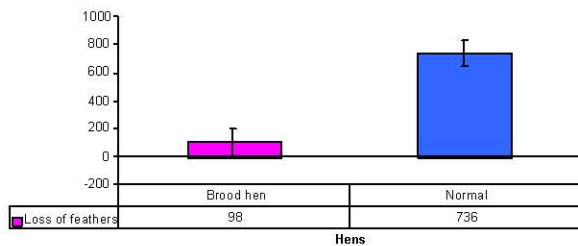


Fig. 1: Mean comparison for Loss of feathers between normal and brood hens

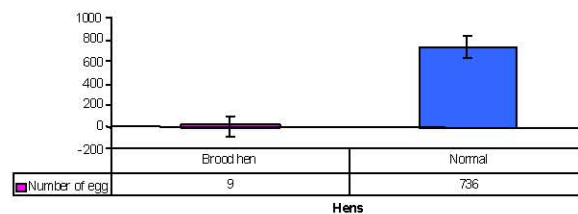


Fig. 2: Mean comparison for Number of eggs between normal and brood hens

Loss of feathers in normal hens was 7 percent and in brood hens was 98 percent (Fig. 1).

Also number of collected eggs in normal hens in 15 days was 736 and in brood hens were only 9 (Fig. 2).

Brooding is with regular shedding of the body feathers. It also naturally present in most birds in a flock can be seen [7] A wing feather to be put in order from 1 to 10 to 1, which fills the body, is exposed to the secondary feathers.

According to the intense interest in the hens to eat, results showed that the normal hens in every days 4-5 times leave their nest, but brood hens only 1-2 time did that and immediately come back on their eggs.

Normally, the first active phase of egg-laying chickens is lying behind the desire to have the brood. Brooding is a genetic trait and can be seen and laying breeds of beef breeds. If a brood hen in the cage floor is wire or rail may be faster return to normal conditions [1].

Isolation

Making the special sounds

Interest to sleeping on the eggs

Lower temperature than is the case because of muscular and metabolic brooding in chicken is low.

other than chicken eggs and also more sensitive and reacts to human presence.

Brood hens during brooding on their planning.

Laying it is stopped.

Brood hen only once a day to eat and drink and be they rather quickly.

The behavior of a brood hen's nest to the outside of the neck feathers erect and the resistance. Fortunately brooding trait with high heritability in breeding programs to select against this trait occurs.

Todiscourage Hens from Brooding by-Using of Management Methodsthat by:

Changing environmental conditions, birds, debarment from sitting on eggs, avoid a long stop in nests, collect more eggs, nest building enough, create homogeneous light shift of all nests and bird nests [8].

Or By-Using of Medicines:

To reduce the amount proactin and gonadal secretion and increases tropine we can do this, aspirin, tamoxifen and clomiphene citrate is used. Each bird should be separated from the rest, like the rest of the feeding of poultry flocks must be implemented [6].

The chickens until the eggs are left to sit on her eggs does not with this method, all the eggs come from chickens simultaneously [9].

CONCLUSION

The best brooding manage methods is that 15 to 21 days is necessary to restart production and fed back to the case in this period should be based on changes in the nutrients it needs to be. Eventually it became clear that the best way to brooding manage, is the increasing of eggs collecting times in the nest and prevent the creation of alternative nest sites for birds on the bed.

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