

Abnormalities in Eggs

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Introduction

Poultry industry is emerging sector of agriculture in India. India ranks third in egg production. About 74 billion of eggs are produced from 260 million layers per annum in India. Egg quality is one of the important factor in poultry industry which influencing economic profitability. Hence, birds should deliver healthy eggs which mean clean, smooth with strong shell. Sometime birds laid abnormal eggs or defective eggs. Abnormal egg means the eggs which have low quality shells or some internal defects. Occasional in production of abnormal eggs from the flock is not to worry, but its persistency should be a matter of concern. Egg abnormalities in chicken can occur due to various factors. Abnormalities of egg greatly affect on hatchability of eggs. Defective or abnormal eggs are also not preferred by consumer. So, it's important to look-out for these problems.

Abnormalities of Eggs

Blood-Stained Eggs:

Eggs that are stained or smeared with blood usually from young pullets that are just started to lay. Prolapse of the cloaca, vent pecking and cannibalism are other causes of bloody eggs. Sudden large increase in day length or birds exposed to very bright light are laid blood smeared eggs.

Shell-less eggs:

Also called 'Rubbery egg' which is laid without a shell layer. These eggs are protected only by the shell membrane to keep everything in place. Probably the most common cause of shell-less eggs is insufficient calcium in the diet. Very young birds may deliver shell-less eggs in which the shell glands are still immature but the birds have started to lay. Salt imbalances, poor diet and lack of calcium, phosphorus or vitamin D are responsible to produce eggs without shell.

Blood spots:

Small spot of blood is seen on egg yolk. Egg yolks form and mature in the hen's ovary. Blood spot is caused by internal bleeding occurring in blood vessels of the ovary or oviduct. This condition is common with birds that lack of vitamin A.

Misshapen eggs:

These eggs are differed from normal egg in size and shape. Eggs are too small or large, round or unusually elongated instead of oval or differ from normal shapes. Bird in stress or Newcastle disease infected bird may lay misshapen egg.

Pimpled eggs:

Classified by presence of small lumps of calcium on the egg shell. The severity of pimples depends on the foreign material present during the calcification process.

Double Yolk eggs:

These eggs have two yolks. Double yolk eggs are caused by rapid ovulation or a productive cycle that is not in sync. This type of problem is common in young birds that are just starting laying.

Dirty eggs:

The egg shell is stained by feces. It is important to avoid feed ingredients which cause wet and sticky droppings. Avoid feed which contain large amount of indigestible compounds.

Body-checked eggs:

Eggs cracked in the shell gland pouch and mended before it is laid. This type of eggs is delivered by birds which is under stress or which get incorrect lighting.



Common causes of abnormal eggs:

1. Birds in stress
2. Overcrowding
3. Disease infection
4. Inadequate nutrition
5. Drastic change in lighting
6. Age and strain of bird

Treatment

1. Provide balanced diet.
2. Incorporation of Ca and shell in diet.
3. Add Vitamin A, D and E powder to drinking water two to three times in week.
4. Follow good management practices.
5. Remove stress factors from the flock.

References

1. 11 abnormalities of eggs www.livestockkenya.com
2. <https://cluckin.net> Abnormal chicken eggs