

BLUE COMB

(Pullet Disease)

By James J. Sheldon

The grooming of healthy replacement pullets for the laying house is the first step in any economically sound commercial laying operation.

With this as a major consideration, every poultryman must exercise all possible control of diseases common to the growing period. Blue comb or pullet disease is just one of the diseases that occur in this period but can be responsible for serious economic loss if not recognized early and treated correctly as soon as possible.

What is Blue Comb?

Blue comb or pullet disease of chickens is most often seen in birds from 15 to 25 weeks of age. A large portion of an apparently healthy flock develops a sudden affliction which is characterized by a lack of appetite, listlessness, sudden deaths, often some diarrhea, a sharp drop in production in laying birds and darkening of the comb (hence the name "blue comb") in a few of the affected birds.

The definite cause of this condition is still not known. Some investigators feel that a virus may be the major factor, while others attribute the condition to various groups of bacteria. The important contributing causes associated with any outbreak of pullet disease are dehydration, recent problems with other diseases, and the stress of initial laying in this age group. These factors are responsible for the severity of the disease as well

Dr. Sheldon, a doctor of veterinary medicine, is an associate professor in the Department of Animal Pathology.

as the long disease course associated with some outbreaks.

Clinical Picture Observed

The disease is most common during the hot months of the summer and fall, but can occur at other times of year associated with stress. Any stress condition during hot months increases the chances of an outbreak. Fifteen to 70 percent of previously apparently healthy flock may show listlessness and lack of appetite reflected by lowered total food consumption. A whitish diarrhea in most instances gradually increases in severity. A serious drop in egg production occurs. Water consumption increases as more birds develop symptoms every day.

The birds affected first are often those that appear most thrifty and in good flesh. Some birds develop a distended sour crop and a few show darkening of the comb, shrivelled legs and sunken eyes, indicating increased dehydration. Total flock involvement is rarely over 30 percent, but in some instances 70 to 80 percent of the birds may be affected.

Deaths are sudden, but if correct treatment is instituted, mortality rarely goes over one to two percent. Even with treatment the disease often lasts one to two weeks but with a high percent of apparent recovery. Some flocks that seem to recover early still lag in egg production for several weeks, and in some birds a partial moult may be noted.

Changes in Affected Birds

It is apparent with non-specific symptoms such as these that accurate disease diagnosis is important to prevent confusion with other disease processes. The most characteristic findings are a blue shrunken comb, distended and sour crop, some thickening of the intestinal wall, yolk contents free in the abdominal cavity,

and a palè chalky color to the pancreas. These may not be present in all birds, and all of the above may not be observed in the same bird. This emphasizes the need for examination of more than one of the affected birds.

Fowl cholera and coccidiosis are the two conditions most often confused with blue comb. The tissue changes, lowered food consumption, increased water consumption, and sharp, rapid drop in egg production are not typical of fowl cholera, while the characteristics of the type of dropping, and tissue changes help rule out coccidiosis. Laboratory confirmation of the disease is important to exclude these and other possible conditions.

Treat at Early Stages

Favorable response has been observed in the field from a wide variety of therapeutic measures, if applied in the early stages. In most instances the widely used epsom salt flushing procedure is not beneficial and aggravates the dehydration already present in many of the birds. Good results have been obtained by using two percent molasses in the water, or in a mash with rolled oats and bran, given on alternate days for two to three hour periods three times per day. Neomycin sulfate, tetracycline, bacitracin, and streptomycin have all shown to have some benefit. Neomycin and supplemental medication is currently widely accepted for treatment.

The medication chosen can be administered in either the feed or water, but due to the depressed appetite observed in many affected birds, the water route is usually preferred. Vitamin supplementation in an abundance of clean, readily available water, and cool well ventilated quarters will help shorten the course of blue comb disease and speed return to production.

(Continued from Previous Page)

ture, music, or drama, does not at all measure up to our ideal of the Honors student. Specialization carried too far leads to a warped development of the mind and personality. Honors students, in cultivating their inner garden, should seek to grow there in a harmonious whole both useful and nourishing vegetables, and esthetically satisfying flowers, even though the latter may seem to have no market value. Indeed, the unmarketable products of our study are frequently from any sound human

viewpoint, the most rewarding and the most important — and we never know at what unforeseen moment they may suddenly acquire great practicality.

There is among outstanding Honors students one common element which is readily distinguishable — an interest in reading and a considerable breadth of reading already acquired before entering college. Absence of this background can of course be corrected subsequently, but possession of it is a decided asset. Reading is of great importance in the cultivation of the mind.

This is not the time for me to speak

at length of the benefits of an intelligently planned program of reading. I wish to mention, however, that reading has three major values. It can acquaint us with distant times and distant lands, and I consider the historical perspective and the knowledge of other peoples it can bring us indispensable in broadening our horizons. It can open our eyes to the world about us, and permit us to understand what we might otherwise have seen with unheeding and uncomprehending eyes. And finally it can give us a look into our own being and let us know ourselves a little better.

(To Be Continued)