

POULTRY METABOLIC DISORDERS AND MYCOTOXINS

Mycotoxicosis refers to all of those diseases caused by the effects of toxins produced by moulds. Disease is often subclinical and may be difficult to diagnose. Problems occur worldwide, but especially climates with high temperature and humidity and where grain is harvested with high water content. Economic impact is considerable in some countries. The book has covered not only the diseases of infectious nature but also the metabolic and nutritional diseases. It contains the latest information in a very palatable manner so that everybody can make use of it with full potential. It will be equally useful to the poultry consultants, diagnosticians, pharmaceutical professionals and particularly student community to face the various internal, external, entrance and competitive examinations with a greater degree of confidence. A nutritionally adequate, purified diet was developed and used in studies to characterize selected aspects of laying hens in which fatty liver hemorrhagic syndrome (FLHS) was induced by overfeeding. Hens consuming the diet ad libitum or intubated with the diet in quantities equivalent to usual daily energy intake maintained normal rates of lay, did not become obese, and did not develop liver hemorrhage. Overfed hens had a 33% incidence of FLHS, as indicated by the presence of severe liver hemorrhage score, and displayed the full range of symptoms associated with spontaneous outbreaks of FLHS, including definitive lesions of hepatic reticulon. Among four groups of hens clinically classified according to rates of liver hemorrhage and egg production, there were no differences noted in total liver fat, liver fat concentration, or final body weight. The problem of moulds and mycotoxicosis in poultry is a worldwide phenomenon and to understand the magnitude of mycotoxicosis problem in poultry, its biochemical, mechanism of action effects on different organs and their prevention.

Contents: Common Diseases of Backyard Poultry; Sudden Death Syndrome; Roundheart and Aortic Rupture in Turkeys; Ascites in Poultry; Hepatic Hemorrhage; Specific Diseases of Poultry; Fatty Liver Hemorrhagic Syndrome in Poultry; Water and Electrolyte Imbalance; Mycotoxins in Poultry; Viral Diseases and their Control.

About the Author



Om Prakash Mathur received his B.Sc. and M.Sc. degree from the faculty of Agriculture University Munger Bihar and he obtained his Ph.D. from the same university. For five years, he was employed at the ministry of agriculture Ram Nagar Munger, where he conducted research on husbandry and nutritional problems of poultry. Afterward, he moved to the Patna, where he has continued his teaching and research. He also served as senior lecturer on poultry nutrition for under graduate and graduate students. Major areas of investigation have been the use of treated waste as poultry feed stuff to reduce the competition of food between humankind and poultry. He had participated as a chairman on numerous international congresses too. At present time, he is working as a guest faculty in the Department of Poultry management, Animal Sciences, Animal Nutrition Group, Munger Bihar.


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**Poultry Metabolic
Disorders and Mycotoxins**

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case study examined 76 backyard chickens that were diagnosed with fatty liver hemorrhagic syndrome between January 2007 and September 2012 and presented for necropsy to the diagnostic laboratory of the California Animal Health and Food Safety Laboratory System.

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Common Diseases of Backyard Poultry

The keeping of backyard poultry gives great enjoyment to many people. As more people in Victoria purchase small acreages, poultry ownership is becoming a popular and economically beneficial pastime. The production of fresh eggs and meat for human consumption, plus the enjoyment they give as pets or show birds, makes poultry valuable members of many families.

Unfortunately, poultry, just like dogs and cats, may become ill from many causes. There are a few major categories of disease that commonly occur in small poultry flocks. These include external and internal parasites, Marek's disease, respiratory disease, nutritional problems, reproductive diseases and fowl pox.

Poultry owners also need to be aware of those diseases exotic to Australia. Exotic diseases pose a risk to commercial poultry flocks if they enter Australia, so poultry keepers need to be aware of these diseases, and report them to the Department of Primary Industries promptly if suspected.

EXTERNAL PARASITES

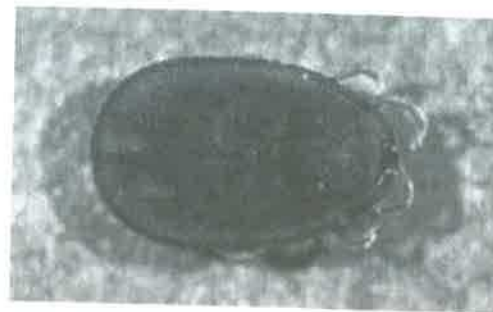


Fig. *Argas persicus* is the common poultry tick found in Victoria

Poultry can carry a large variety of parasites on their bodies. These range in size from large, blood sucking ticks up to 1cm in size, down to the microscopic scaly face (and leg) mite that is less than 0.5mm in size. Other external parasites that are commonly encountered are the stickfast flea (small, black fleas on the comb that do not move), and lice (small, white insects that move rapidly through