

Animal Health in Developing Countries



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POULTRY TIPS

By Tom H. Eleazer
Clemson College

Minimizing the Threat of Disease in Poultry Flocks

Sanitation

Clean up facilities first, then disinfect. Most disinfectants are effective only after cleanup.

Avoid Overcrowding

Overcrowding stresses birds and allows for a rapid build-up of disease agents.

All-In-All-Out

It helps to have the premises free of birds for a while if possible. Keep breeders away from grow-out premises.

Soil Fumigation

This works well for some diseases.

Vaccination

This works well for some diseases.

Medication

Especially useful for coccidiosis and ulcerative enteritis

General Gut Conditions- Enteritis

Mild Flush

Molasses, 1 pint (16 oz) per 10 gallons (40 liters) of drinking water for the first 2-3 days, then 1 pint (16 oz) per 20 gallons (80 liters) for 10-12 more days. This flushes the gut, provides minerals (especially potassium), stimulates an appetite, and gives them energy from the sugar.

Quick Purge

Used to treat a flock when a quick purge is needed, such as when botulism is suspected. Use Epsom Salts, 1 pound (16 oz) per 10 gallons (40 liters) drinking water for 1/2 day.

Terramycin

1 teaspoon (5 ml) per gallon (4 liters) of water for 7-10 days, helps with some general gut conditions following a flush.

Antibiotics

Check water pH; if it is 7 or higher, add 2 1/2 ounces of apple cider vinegar per 5 gallons (20 liters) of drinking water before mixing in antibiotics.

Penicillin (water soluble) Powder

1 rounded teaspoonful (5 ml) in 5 gallons (20 liters) of water for 7-10 days. Indicated with ulcerative enteritis, and other gut conditions such as malabsorption syndrome. Specific for erysipelas.

Gallimycin (Erythromycin)

1 teaspoon (5 ml) per gallon (4 liters) of water for 5-7 days. Acidify water with apple cider vinegar treatment.

Coccidiosis

Prevention

Game bird starter feed with monensin (Coban) at 73 grams per ton of feed. Begin birds on this treatment at one day old, and continue until at least 10-12 weeks old.

Treatment

Amprolium (Amprol), follow label directions. Liquid product dosage is 1 teaspoonful (5 ml) per gallon (4 liters) of drinking water for 5-7 days.

Quail Pox

Vaccinate at 4-6 weeks of age. Fowl Pox vaccine will not immunize against Quail Pox

SWINE UPDATE

by Jerry P. Kunesh

Iowa State University

Porcine Reproductive and Respiratory Syndrome (PRRS) has been the most troublesome disease for the swine industry during the past several years. The condition is caused by a virus. To date, in excess of 30 strains of the virus have been isolated. Thus far, they have not been fully characterized. Some strains produce almost exclusively respiratory disease, while others produce various combinations of both respiratory and reproductive disease.

Several serological tests have been developed to detect the presence of PRRS antibodies. The two most commonly used are the indirect fluorescent antibody (IFA) or the enzyme-linked immunoassay tests (ELISA). The IFA test is recognized most widely by the international community, however, the ELISA test appears to be much more sensitive and accurate. Although it appears that all strains of the virus stimulate production of antibody detectable by the serological tests used, they do not necessarily cross-immunize. Thus, an individual or a herd that is exposed to a single strain of the virus will develop protective antibody to that strain. However, if they are exposed to a different strain of the virus, they may be totally unprotected by antibody produced by the first strain of virus.

Currently developed PRRS vaccines have been of limited value because of strain specificity. Recently, it has been shown that pigs vaccinated with PRRS vaccine are capable of transmitting vaccine virus to native animals.

The mode of virus transmission appears to be pig to pig, or with semen from infected boars. The virus has been isolated from wild mallard ducks, but their role in transmission of virus from swine herd to swine herd is questionable. Work done at Iowa State University indicates that the virus travels only very short distances as an aerosol, and is very sensitive to drying.

The incidence of PRRS positive herds in the US appears to be approximately 30%, based on serological surveys. Negative herds are best protected by introducing only negative animals or semen from negative boars housed in negative herds or negative semen centers. Herd matching based on serological testing may not be wise due to the variation of PRRS virus strains. Positive herds are best handled by introducing replacement animals at least 60 days, and preferably 90 or more days before breeding, to allow time for resistance to develop. Following recovery, it is not known how long the animal remains as an inapparent carrier, but it appears to be at least several months.

Swine Management Update

by Jerry P. Kunesh
Iowa State University

Segregated Early Weaning (SEW) initially was believed to eliminate many diseases from pigs reared using this system. As more research becomes available, it is apparent that a few diseases can be eliminated using this system. More important, were the animal husbandry aspects i.e. temperature and ventilation control, space, water, nutrition, and sanitation play a major role in increased performance. Most common pathogens are still present, but do not cause clinical disease under the nearly ideal conditions which are provided in properly run SEW programs.

Therapeutics Update

by Jerry P. Kunesh
Iowa State University

Ceftiofur Sodium has been available for some time as a reconstitutable powder. Ceftiofur hydrochloride is now available in a stable ready-to-use liquid form. It has the same spectrum of activity and usages as ceftiofur sodium (Excenel- Pharmacia & Upjohn).

A chloramphenicol-like product has been developed and approved for use in cattle. The new product, Florfenicol is chemically very similar to Chloramphenicol ("N" group removed) but does not have the undesirable side effects. This product will very likely soon be approved for use in swine, and will serve as a much-needed broad spectrum antibiotic (Nuflor- ScheringPlough)

Readers Contribute

This portion of Animal Health in Developing Countries is set aside for you, the readers. If you have a practical tip or successful treatment that you would like to share, this is the place! Please send your livestock management tips, successful therapies, and other information relating to animal health in developing countries to: Dr. Leroy Dorminy, c/o Christian Veterinary Mission, 19303 Fremont Avenue North, Seattle, WA, 98133. Or eMail him at Missionvet@aol.com.

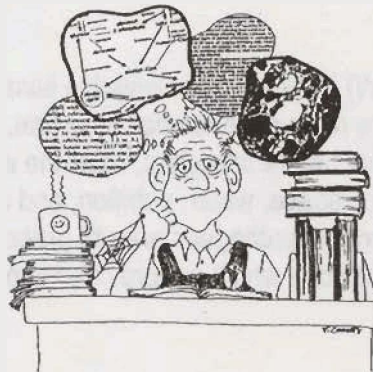
Ask the Experts

Question: What is the relationship between nutrition and internal parasite control?

Answer: Good nutrition is one of the best preventatives for internal parasites. There is a direct correlation between poor nutrition and clinical parasitism. Of course there are other factors involved such as parasite buildup, rotation of pastures, deworming regimen and types of wormers used; but a good starting point is to look at the basic nutrition of the animals.

Animal Health Humor

by Todd Cooney, DVM



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