



Extension FactSheet

Veterinary Preventive Medicine, 1900 Coffey Rd., Columbus, OH 43210

Less Common External Parasites in Poultry

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Although lice and mites are the most common external parasites of poultry, below are other external parasites that may be occasionally seen in poultry. The external parasites that will be discussed are chiggers, stick-tight fleas, fowl ticks, and scaly-leg mites.

Chiggers

Chiggers form clusters on the skin around the wings, neck, and breast of poultry and inject a substance that causes allergic skin reactions. The young chiggers in the larval stages are the ones that do most of the biting. They are 0.16mm in diameter, yellow-orange, and have 6 legs. Adult chiggers have a dense feathery hair coat that gives them a velvety appearance. They are bright red in color and can grow to 1 to 2mm in length. The lifecycle for a chigger is 50 days. These chiggers are the same chigger pests that can affect humans and cause similar problems. Chiggers are primarily a problem in poultry that are raised on pasture.

Poultry that are infested with chiggers are droopy and emaciated. They may have abscesses and extensive skin inflammation. It takes birds at least three weeks to heal after a chigger problem. If chiggers infest a market poultry flock, the carcass quality will be greatly reduced. Chiggers cause red scabby lesions on the carcass. In severe cases, death may result due to secondary bacterial infections.

Infested birds should be treated with a kitten-strength dose of a pyrethrin-based spray and removed from the infested pastures.

Stick-tight Fleas

Stick-tight fleas are the smallest type of fleas (half the size of a cat or dog flea). They are a burrowing and stationary flea as compared to most fleas, which are jumping fleas. These fleas lay their eggs around the eyes and wattles of chickens causing nodules. Once the flea larvae hatch, they drop off the bird to live in the soil for approximately two weeks. Stick-tight fleas feed off the host bird causing skin irritations and ulcerations. Severe infestations may lead to blindness. Stick-tight fleas often congregate into groups of at least 100 fleas. These fleas are capable of being transferred to other animals like dogs, cats, horses, and even humans.

Infested birds will have small brown dots clinging to or embedded into the fleshy portions of the head. The head will become very inflamed and red due to the irritation of the flea living under the skin. Egg production and feed efficiency will decline greatly and birds will become anemic and emaciated. Secondary bacterial infections may develop because of the birds' weakened immune system. In severe cases, stick-tight flea infestations may kill young birds.

Stick-tight flea treatments include using carbaryl (Sevin®) to dust the litter and facilities; removal of the fleas using tweezers; or by smothering them with petroleum jelly. In addition, even after treatment, although the fleas have died, they will remain attached to the bird. Raising birds in wire cages at least three feet above the ground is an alternative prevention method.

Fowl Ticks

Fowl ticks, also known as "blue bugs," are a soft-bodied tick belonging to the *Argas* genus of ticks. These ticks are very different from the common dog or cat tick. Ticks are a light reddish-brown to a dark brown in color with wrinkled leathery skin. The 8-legged tick has a thin, flat, egg-shaped body measuring 6 to 9mm in length. The ticks require a blood meal just prior to reproduction but can live for over one year without a blood meal. They feed off their host's blood primarily at night. The life cycle of a tick includes 3 weeks for the egg to hatch and then 30 days to reach the adult stage. Females lay 25 to 100 eggs at a time for a total of about 700 eggs in her lifetime. Ticks lay their eggs in the cracks and crevices of the housing facility.

Fowl tick infestations can cause a decrease in egg production; an increase in disease incidence; weight loss; emaciation; and in severe cases, death.

Treatment for ticks include a thorough cleaning and sanitizing of the poultry house.

Scaly-Leg Mite

The scaly-leg mite is 8-legged and lives under the scales of the legs and feet of the birds. This mite is pale gray and has a flat round body. They burrow under the leg scales to feed on connective tissue. The life cycle of this mite is 1 to 2 weeks.

This mite is different from other mites in that they cause itching and irritation of the legs. The scales lift and there is subsequent scabbing or crusting. The diameter of a bird's leg shaft may double in size due to scaly-leg mite infestations. White dusty scabs can be observed. In severe cases, birds will develop leg and joint problems making walking difficult. In addition, toe necrosis has been observed (Figure 1).

There are several treatment methods available to control scaly-leg mites. Treatment with Ivermectin® is recommended. In addition, coating the entire leg shaft with petroleum jelly will help to moisturize the scales and revert the scales back to normal in less severe cases.

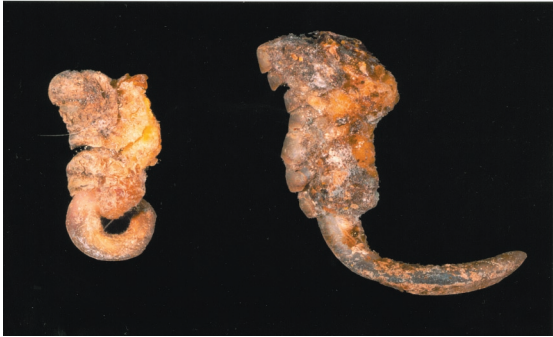


Figure 1. Toes that have fallen off a chicken's feet due to a severe scaly-leg mite infestation.

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