Sticktight Flea
(*Echidnophaga gallinacea* [Westwood])

General Information

Sticktight fleas are ectoparasites that, as adults, embed themselves into the skin of chickens, turkeys, and other animals. They are usually not problematic in poultry systems where birds are housed in cages suspended above the ground. Sticktight fleas are most common in free-range and backyard poultry systems. Immature fleas require organic substrate in the litter or soil to develop. This habitat is not available to fleas in caged-bird systems.

Identification and Life History

Sticktight flea adults are dark brown and laterally flattened like most fleas (Fig. 1). However, unlike the more common cat or dog fleas, adult sticktight fleas embed themselves in the bare skin on the head of poultry, using their elongated mouthparts to stay in place. They can also be found on other hosts such as squirrels, dogs, cats, foxes, or even people, though infestation of humans is uncommon. Without detaching from the host, females lay their eggs which fall to the litter or soil. Larvae hatch and live on organic material and digested blood from adult fleas in the litter/soil. When ready to pupate, the immature will form a cocoon of silk and dust to pupate within. Emerging adults have powerful jumping legs and acquire new hosts as these animals wander by. The life cycle from egg to adult takes about one month to complete.

Damage

Sticktight flea adults can cause irritation to their host and blood loss, which can lead to anemia or even death. This is pronounced in unhealthy animals. Sticktight fleas are not known to be important vectors of disease.

Figure 1. Adult sticktight flea. Arrow indicates mouthparts. Image by Amy C. Murillo, UC Riverside.

Integrated Pest Management

Monitoring: Direct inspection of chickens is the best way to detect an infestation (Fig. 2). Because these fleas remain on the host, inspection can be done during daytime. Birds should be checked regularly to prevent large flea

populations from developing. A cursory examination of the head of the birds is usually all that is needed to determine if this flea is present in numbers that may be of concern. A more regular and thorough examination should be conducted following treatment (see below) to assure that fleas are eliminated or at least are not increasing to problematic levels.

Figure 2. Adult sticktight fleas on hen (arrows). Image by Amy C. Murillo, UC Riverside.

Management Insecticides or petroleum jelly can be applied directly to adult fleas using a cotton swab or paint brush. Only pesticides registered for topical application to poultry should be used. However, the immature stages may persist in the environment, so removal of bedding/straw and the use of insecticidal dust may need to be applied to prevent reinfestation of animals. The fleas may also be introduced or reintroduced to a property by feral or wild animals. Access of wild animals to birds should be limited as much as possible. In these cases, direct control of adult fleas on poultry via cotton swab application may be best.

References for more information

Axtell, R.C. 1985. Arthropod Pests of Poultry. In: Livestock Entomology (ed. Williams, R.E., Hall, R.D., Broce, A.B., Scholl, P.J.), pp. 269-295. New York: Wiley-Interscience Publication. Print.

Koehler, P.G., R.M. Pereira, and P.E. Kaufman. 1991. Sticktight Flea, *Echidnophaga gallinacea*. Univ. of Florida IFAS Extension. < https://edis.ifas.ufl.edu/mg236>.

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