MITES DISRUPT A COMMERCIAL CRICKET OPERATION IN SOUTH CAROLINA

Key Words: *Coglyphus berlesei, Acheta domesticus,* insect colonization.

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Crickets (Orthoptera: Gryllidae) are reared commercially for use by fishermen as bait. Production of house crickets, *Acheta domesticus* (L.), was severely disrupted in a commercial cricket operation in South Carolina when a mite (Acarina: Acaridae) population built up in the egg-laying pans.

Since the mites could be observed actively feeding on the cricket eggs, it was originally suspected that they were predatory mites. In an effort to find the source of infestation, the peat moss used as an egg-laying medium was examined. Fresh peat moss was not infested; yet, mites were readily observed feeding upon cricket eggs in the used medium.

Mites, as well as chicken lice, were found in egg flats which had not yet been in contact with the crickets. This led to speculation that the egg flats might be the source of infestation, and sanitation measures were recommended.

Subsequently, the mites were positively identified as *Coglyphus berlesei* (Michael) by R. Smiley, USDA, Systematic Entomology Laboratory, Washington, DC. This is not a predatory mite, as orginally suspected, but a stored product mite. This mite has been known to infest insect colonies, which led to speculation that the source of the infestation may have been through the cricket food supply. An examination of several bags of fresh cricket food, a grain product, yielded no mites. Upon questioning, the operator admitted to using several bags of feed in excess of a year old. Examination of that food source yielded an overwhelming population of the mites.

Thus, it now seems likely that infestation of the cricket eggs by the mites was through the cricket food source. It was recommended that all cricket egg-laying pans be emptied and sterilized, that all old food be discarded, and that proper sanitary measures be followed in the future to prevent reinfestation. — D. G. Manley, Department of Entomology, Clemson University, Pee Dee Research and Education Center, Florence, SC 29502. Published by permission of the Director as Technical Contribution No. 2399 of the S. C. Agric. Exp. Stn. (Accepted for publication June 5, 1985).