

P287 Abstract

Control of poultry red mites (*Dermanyssus gallinae*) by predator mites or inert dusts, tested in the laboratory and in the field

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Objective

Control of poultry red mites (*Dermanyssus gallinae*) by predator mites or inert dusts

Material and methods

Three candidate predator mites, *H aculeifer*, *H miles* and *M robustulus* were tested in the laboratory for ability to feed on *D gallinae*. *H miles* were released in two layer farms with red mite problems

D gallinae were exposed to three different types of inert dust under laboratory conditions. Inventory in an empty cage layer system, heavily infested with red mites, was covered in a calcium carbonate based dust. Mite presence was followed during the next production period by visual inspection, and tackled by repeated nap sac spraying

Results

All three predator mites reduced the number of red mites in the laboratory. Released in the poultry barn, the effect of the predator mites was negligible under the given conditions

The inert dusts killed red mites after variable time under laboratory conditions. Dusting the inventory in a layer barn had an immediate effect, but four weeks into production, red mites were again visible. Goal-oriented follow-up distribution of the dust kept the number of mites on a low level

Conclusions

Predatory mites may be used for control of blood mites provided the number of predatory mites match or outnumber the number of blood mites

Desiccation by different types of inert dust works, depending on the powder getting in touch with the mites.