

## INSECT CONTROL IN POULTRY HOUSING

The principle concern is the infestation by the Litter Beetle (*Alphitobius diaperinus*). The temperature and general conditions in poultry housing together with the availability of food encourages the multiplication, particularly in turkey and breeding operations, where occupation is for many weeks allowing uninterrupted growth and multiplication. Infestation usually becomes of concern when the adult beetles and mature larvae begin to leave the litter and invade the house structure. At this stage damage to insulation material and electrical installations occur.

Each female litter beetle can lay 50 - 300 eggs which hatch within the week.

Within 6 - 9 weeks (within the normal broiler production cycle) a small infestation can increase a hundred fold. This explains the often explosive invasion of the insect.

Apart from consuming food and damaging buildings, beetles and larvae also consume faecal material and carcasses. This has resulted in their identification as important vectors of diseases such as Gumboro (IBD), Salmonellosis and Mareks disease.

In commercial laying houses, particularly those with deep pit or built up litter, infestation is not only associated with the Litter beetle but also with the Hide Beetle (*Dermestes maculatus*).

Whilst a laying flock may only be in production for one year, it is not uncommon for pits to be left for several years. Since the life cycle of the hide beetle is completed in 80 days, and results in a 20 - 30 fold increase in numbers, the level of infestation can rise to considerable levels in a year or two.

The major problem is the structural damage caused by the larvae which bore holes (10m x 4mm) to pupate in. Repeated attack to structural timbers can cause early failure or collapse, particularly of timbers embedded in the pit.

Control of Litter beetle, Hide beetle and other insect pests can be quickly, safely and effectively achieved with Melrose's SUPER FOG, a pyrethrin based insecticide for space and surface control.

Apply Melrose's SUPER FOG as a band spray immediately after following depopulation before litter removal while the building is still warm. In warm buildings the beetles will remain in the body of the house.

If the house is left to cool the beetles will rapidly migrate into the insulation and other places where it is difficult to direct the spray resulting in a reduced level of kill.

To apply following a disinfection programme; warm the building before application to encourage beetles from their hiding places. This can be done just before introducing new litter and repopulation.

Serious infestation may require a double application, once immediately following depopulation and again following disinfection.