



INSIDER INTEL

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In's and Out's of Litter Beetle Management

Overview

Litter beetles (*Alphitobius diaperinus*), also known as lesser mealworms or darkling beetles, are significant pests in poultry facilities, thriving in warm, damp manure and litter. They carry diseases (Salmonella, E. coli), destroy insulation, and reduce feed conversion, requiring an integrated approach to control infestations and minimize damage.

Checklist

Please utilize the Do's and Don'ts lists below to optimize litter beetle control.

Do:

- Use the highest label rate for all products; using a lower rate can accelerate the development of resistance.
- Most premise sprays are labeled for 1 gal of solution per 1,000 ft² of application area.
- Use insect growth regulators (IGRs) in conjunction with contact insecticides to target multiple life stages.
- Make applications as close to bird placement as possible, preferably no longer than 2-3 days.
- Cover as much of the litter as possible when applying premise sprays. Whole house treatments are more thorough, and insects can't get away from the insecticide treatment. Band application may be used if the label allows but may lead to behavioral resistance.
- Use a licensed custom applicator for premise sprays. They have access to restricted use products and will provide a consistent application.
- Make exterior applications to barns to prevent beetles from migrating into the house.
- Utilize mid-flock treatments when premise sprays become ineffective due to long grow outs.
- Clean out as often as possible. Once per year would be ideal. Windrow litter to drive beetles out of the litter and kill trapped pupae and eggs with heat. Spray windrows with a quick knockdown product to kill escaping adults and larvae.
- Spray used litter stacked on the farm with a quick knockdown product to keep beetles from migrating back into the poultry barn.
- Clean up unnecessary food sources such as dead birds, broken eggs, and spilled feed.
- Apply boric acid underneath feed lines and against side walls at 20 lbs/1,000 ft², especially for long grow out times.
- Rotate insecticide classes every 2-3 flocks.



Don't:

- Cake-out, pulverize, till, or otherwise disturb the litter after insecticide application.
- Apply a liquid litter amendment after an insecticide application.
- Use more than the label rate within an application area.
- Use less than the highest label rate. You will not achieve adequate population management.
- Skip a premise spray treatment for a flock.
- Be too hasty to judge a treatment. Make assessment of product efficacy 7-14 days after placement.