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Insecticidal Control of Invasive Crane Flies in the Northeastern U.S.

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Objective

Evaluate the insecticidal options for controlling European crane fly larvae in the field.

Summary

Crane fly larvae inhabit the top layer of soil and feed on the roots and crowns of turfgrass plants. Damage from their feeding can lead to severe thinning and dieback of turfgrass.

Because crane flies are an emerging pest in turfgrass, relatively few products are labeled for their control. Therefore, a range of active ingredients, products and rates, including some not currently registered for crane flies or golf courses were evaluated. Insecticidal control for crane flies is preventive in late fall (larvae are too small to scout and damage is uncommon) and curative in early spring (larvae are large and big enough to scout and damage is common).



Results

- There are efficacious products for the insecticidal control of invasive crane fly larvae in turfgrass during both preventative and curative application windows.
- The most efficacious active ingredients for targeting early instars in late-fall application were Talstar, Sevin, Acelepryn, and Dylox 80WP.
- The most efficacious insecticides for targeting large instars in spring applications were Arena and Safari.
- Among the best performing products, Arena and Safari are not labeled for control of invasive crane flies, and neither are registered in New York. Acelepryn is labeled for control of crane fly larvae, but is not yet registered in New York.
- Continuing studies are necessary to strengthen product recommendations and generate information on how to best tailor insecticidal controls to crane fly species, seasonal application window and geographic region.

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