Corn Rootworm Egg Hatch Underway in 2013

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Abstract
A few areas of Iowa are approaching 50 percent corn rootworm egg hatch now (Figure 1), including the Muscatine area. Many other regions will be reaching 700 degree days within 7-14 days, depending on future temperatures. Cooler spring temperatures in 2013 have slowed down development, especially compared to rootworm hatch last year.

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Corn Rootworm Egg Hatch Underway in 2013

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Figure 1. Predicted corn rootworm egg hatch in Iowa as of June 13, 2013. Expect 50 percent hatch between 684-767 degree days. Map data courtesy of Iowa Environmental Mesonet, ISU Department of Agronomy. Click here for current degree day accumulation for corn rootworm.

Corn rootworm egg hatch in Iowa typically occurs from late May to the middle of June, with an average hatching date around June 6. Development is driven by soil temperature, which is measured by degree days. Research suggests about 50 percent of egg hatch occurs between 684-767 accumulated degree days (base 52°F, soil). Shortly after each egg hatch, young larvae will begin feeding on root hairs and inside roots. At they develop, larvae (Photo 1) will begin feeding on root tips. A severe infestation can destroy nodes 4-6, which interferes with water/nutrient uptake and makes the plant unstable (Photo 2).
Roger Elmore, ISU Extension corn agronomist, reported the weather has delayed corn planting in 2013. But with the predicted egg hatch starting in late May and early June, the larvae should have sufficient root tissue to feed...
on because corn will be germinated. Saturated soils during egg hatch will diminish overall corn rootworm pressure, and the high adoption of Bt corn should decrease populations in most fields. However, every field should be scouted for corn rootworm damage regardless of the seed selection (i.e., corn rootworm populations are the highest priority for inspection. Assess corn rootworm root injury and adjust management strategies if the average injury is above 0.5 on a 0-3 rating scale. Aaron Gassmann, ISU corn entomologist, has a webpage for additional corn rootworm management information, including an interactive node-injury scale demonstration and efficacy evaluations.

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