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Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants, and Extension Personnel

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May 25, 2007 No. 13

Accumulated GDD's – March 1 – May 23

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Baxter Springs – 996.5; Clyde – 717; El Dorado – 842; Elkhart – 657.5; Ellsworth – 795.5; Emporia – 829.5; Garden City – 662.5; Hays – 647; Hiawatha – 778; Hutchinson – 797.5; Independence – 968.5; Kansas City – 825.5; Lawrence – 812; Manhattan – 808; Newton – 772; Olathe – 809.5; Pittsburg – 990.5; Saint Francis – 431.5; Salina – 795.5; Topeka – 870.5; and Wichita – 845.5.

Initiation of 2007 bagworm activities

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Small bagworms were noted in the Manhattan area on May 19. Given the size of their bags, it was estimated that they were a week old, pushing back the date of their first appearance to May 12. As of May 12, Manhattan had accumulated 600 GDD's. An image of a newly emerged bagworm larva in Garden City was taken on May 14 where the accumulated GDD's equaled 518. Given these figures, bagworm activities likely are underway throughout most of Kansas with the exception of the northwest area where GDD's have been slow to accumulate.

Newly emerged larvae are difficult to detect given their small size (1 mm in length). Within an hour after gaining a foothold on their host, larvae will complete the initial construction of the bag which will serve as their home during the remainder of their feeding period. With patience and close inspections, movements can be detected which give way their presence. Within a week, bagworms are more easily detected as their bags are of greater, more observable size, especially when contrasted against the green foliage upon which they feed.



Bagworm with newly constructed bag and
Newly emerged bagworm larva



1-week old bagworm

Keeping in mind that there is an extended 4-5 week hatching period for bagworms, there are two approaches for managing/reducing numbers bagworms: two sprays versus a single spray. If choosing the former, the first insecticide application should be applied the last week of May through the first week of June to eliminate the front-end of the hatch. The second “clean-up” application should be applied the last week of June through the first week of July to eliminate the remainder of the hatch. **IF** one decides to control bagworms with but a single spray, that application should be applied the last week of June through the first week of July.

Various active ingredients have been formulated into a myriad of insecticidal products formulated for sale to and use by homeowners. Synthetic products include organophosphate, carbamate and pyrethroid AI's. Organic alternatives include *Bacillus thuringiensis* and spinosad.

When attempting to control bagworm, 3 factors are more important than what insecticide/active ingredient is selected for treatment applications. First, as previously indicated, **timing is critical**. Second, **thorough coverage** is required to “touch”/expose all bagworms to the insecticide (whether by contact or consumption of treated foliage). Merely applying a fine mist to peripheral foliage of infested trees/shrubs allows bagworms “deeper in” to escape treatment and thus continue their feeding and development. Third, **apply treatments to all infested trees/shrubs** as opposed to only those that are most heavily infested hosts.

Bob Bauernfeind

Sincerely,

Robert J. Bauernfeind
Extension Specialist
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