



## A two-crop beetle update

Feeding by bean leaf beetles and corn flea beetles has been reported in Iowa fields. These beetles are very noticeable on emerging soybean and corn, respectively, which leads to questions about needs for pesticide treatment.

### Corn flea beetles

The April 5, 1999, ICM newsletter article [Stewart's disease in 1999](#) [1] outlined management strategies for corn flea beetles, with the following thresholds for corn:

- Field corn prior to stage V5: Treat if 50 percent of plants shows severe feeding injury and 5 or more beetles per plant are observed feeding.
- Seed corn (susceptible hybrids): Treat if 10 percent of plants shows severe feeding damage and 2 or more beetles per plant are observed feeding.

We should be at or past the peak in feeding activity for corn flea beetles, but scouting should continue until corn reaches stage V5.

### Bean leaf beetles

Bean leaf beetles overwinter as adults in bean stubble. As they emerge in the spring, the beetles move to host plants (most notably alfalfa) where they begin feeding. Soybeans are the preferred food plants, so once a field of soybeans emerges, the beetles typically move to the beans where they can cause considerable cosmetic damage. Research shows that damage from bean leaf beetle from early-season feeding is virtually never severe enough to warrant insecticide treatment.

Some concern has been raised about a viral disease of soybeans called bean pod mottle virus (BPMV). BPMV is transmitted within fields from single infected plants to uninfected plants in large part by bean leaf beetle feeding. The article [Seedborne diseases of soybean](#) [2] in the April 5, 1999, ICM newsletter discussed this disease briefly. Although bean leaf beetle can transmit the virus from plant to plant in the field, the development of the disease is complex. Disease transmission most likely occurs during the earliest bean leaf beetle feeding activity. Some have suggested that an early insecticide treatment could knock down the bean leaf beetle population and prevent virus transmission. There is no evidence that early-season insecticide treatment will reduce viral symptoms on beans; therefore, **ISU Extension does not recommend this practice**. The insecticide will have no effect if the beetles are not yet present, and by the time beetles are observed in the field, enough feeding will have occurred to have already spread the disease. Also, reinfestation by bean leaf beetle following

insecticide treatment will continue the disease transmission between plants. BPMV is a difficult disease to manage because its economic effect and distribution in and between soybean fields are dependent on many factors.

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<http://www.ipm.iastate.edu/ipm/icm//ipm/icm/1999/5-31-1999/twocrop.html>

**Links:**

[1] <http://www.ipm.iastate.edu/ipm/icm/1999/4-5-1999/stewart1999.html>

[2] <http://www.ipm.iastate.edu/ipm/icm/1999/4-5-1999/seedsoy99.html>

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