



## Diagnosing stink bug injury to vegetables

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In the mid-Atlantic U.S. vegetable crops are attacked by several different stink bug species (1). The primary pest species include: the invasive brown marmorated stink bug (BMSB), *Halyomorpha halys*, which has become the dominant species in most landscapes (2), brown stink bug, *Euschistus servus* Say, which is the most common species attacking tomatoes; green stink bug, *Chinavia hilaris* Say (3); and harlequin bug, *Murgantia histrionica*, which is primarily a pest of brassica vegetables only (4). All stink bugs are piercing sucking feeders that insert their stylets into the fruit, pods, buds, leaves, and stems of plants. Their injury can manifest itself in different ways. For instance, feeding on the fruit of peppers (Fig. 1) and tomatoes (Fig. 2) will produce characteristic white or yellow scars on the skin where the feeding stylets were inserted into the fruit, or sunken in areas from the internal fruit tissue collapsing below (Fig. 3). In corn, the feeding stylets of BMSB nymphs and adults are inserted through the husk and pierce the tender kernels, which may cause them to become aborted, collapsed or discolored (Figs. 4 & 5). Feeding injury to beans may result in scarred, faded out sunken areas (Fig. 6), as well as deformed pods (Fig. 7), which also occurs in okra (Fig. 8). The primary pest of brassica crops such as collards, broccoli, cabbage, and kale is harlequin bug. Both adults and nymphs of this species feed on aboveground plant tissues, leaving characteristic white blotches on the leaves (Fig. 9), which can turn necrotic and wilt under heavy pest pressure (Fig. 10).



**Fig. 1. BMSB nymph feeding on pepper.**  
(Photo by A. Morehead)



**Fig. 2. Brown stink bug feeding on tomato.**  
(Photo by A. Morehead)



**Fig. 3. Damaged white spongy tissue below where BMSB stylets were inserted.**  
(Photo by G. Dively, U. MD).



**Fig. 4. BMSB feeding injury on corn kernels**  
(Photo by W. Cissel, Univ. Delaware).



**Fig. 5. BMSB feeding injury on corn kernels.**  
(Photo by T. Kuhar)



**Fig. 6. Severe BMSB feeding injury on snap beans.**  
(Photo by H. Doughty, Virginia Tech)



**Fig. 7. Resulting deformity from BMSB feeding on developing bean pods.**  
(Photo by A. Morehead)



**Fig. 8. Resulting deformity from BMSB feeding on developing okra pods.** (Photo by G. Dively, U. MD)





**Fig. 9. Harlequin bug feeding injury on collards. (Photo by T. Dimeglio)**



**Fig. 10. Severe harlequin bug feeding injury. (Photo by T. Dimeglio)**

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