K-STATE Research and Extension | Meadowlark District

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David Hallauer
District Extension Agent, Crops & Soils

Soybean Pests – Pillbug

Two soybean pest related news articles were distributed this week by the K-State Research and Extension news service. One was picked up by multiple news outlets with one headline suggesting crops were being devoured by the swarming of 'orange maggots'. The other was about pillbugs (otherwise known as the Roly Poly). Want to guess which one likely makes you stop and take a second read? NOTE: it's not the one that sound the most menacing…

To be fair, Soybean Gall Midge *is* a serious soybean pest. It *can* do damage and *has* been an issue across northern portions of the western soybean growing region. Our Nebraska neighbors have reported significant damage issues associated with Soybean Gall Midge, and while we *have* seen it in Kansas, large field wide issues have yet to be noted. So, while it is an important pest (one we'll discuss next week), a more 'current' pest of instance is the pillbug.

Pillbug injury has been noted this spring predominantly in south central Kansas and is likely associated with recent soaking rains in that region of the state. While we haven't seen it on a widespread basis here, some slight stand losses likely attributable to pillbug have been noted.

Pillbugs aren't generally a problem for us because our soils typically drain fairly well. Unless we see excess rainfall that keeps moisture in the soil surface or even areas of a field that don't dry out as quickly, pillbugs are likely not going to be an issue. They need a moist habitat to survive and in hot weather tend to move to areas that can provide dark/damp conditions.

Under the right circumstances, however, that combination of dark and damp could come from crop residue. Long time K-State Research and Extension Field Crops Entomologist Dr. Jeff Whitworth noted an increase in pillbug damage some years back as higher residue and no-till production systems increased. The conditions these productions systems encourage – while often good for the crop - is perfect pillbug habitat with heavy residue keeping the surface cool and moist. Under these conditions, pillbugs can be prolific, with each female producing up to 100 eggs during a reproductive period for as many as one to three generations per year. Since the pillbug hatching period often coincides with soybean planting, germinating seeds are often easy feeding, sometimes resulting in plants being clipped off just above the soil surface.

Foliar insecticide applications are a possibility, but Whitworth notes potential efficacy challenges with them due to interception by soil surface residue. Said residue can keep the insecticide from reaching the soil surface where pillbugs are feeding, limiting control.

If insecticide applications are being considered, first evaluate the stand. In many cases, limited feeding might be tolerated, particularly when good crop growing conditions might 'chase' pillbugs into hiding. If damage is found, do some stand counts to determine if plant damage is heavy enough to warrant treatment.

If you've noted soybean stand losses and weren't sure what they were from, pillbugs are a possible culprit (you'll likely have to sweep away the residue to find them…) For additional information on pillbugs, including pictures of feeding injury and management considerations, visit:
https://bookstore.ksre.ksu.edu/download/pillbugs-kansas-crop-pests_MF2855