

Issues Arise with Corn Ear Development across the Corn Belt & Soybean Pod Injury and Damage Occur
Julie Abendroth, MU Extension Regional Agronomist: 816/776-6961

As harvest of the corn crop is nearing completion in many areas, growers have the opportunity to determine the profitability of different management tactics used during the cropping year. Examining corn ears and yield patterns at harvest time allows the grower to gather information about the stresses incurred during the season.

Across the Corn Belt, a minority of corn fields in both 2006 and 2007 have shown plants that appear normal, but with ear shoots carrying either no ear or only a short remnant of an ear. The injured plants show ears which were apparently “arrested” (or halted) in their development during the late vegetative stages. While there appears to be no apparent cause, many of the problematic fields had received a fungicide application. While the corn injury is still under investigation, crop scientists note the possibility of the barren ears being due to a fungicide application immediately prior to tassel emergence. As the “arrested” ear development is investigated, it is important for growers who applied a fungicide to their corn to record specific information regarding the hybrid, spray application, precipitation, and field history. Record whether any problems occurred with ear formation.

As the soybean crop matures, producers are encouraged to evaluate pod set and quality prior to harvest, investigating the final amount of pod injury. Although varying levels of bean leaf beetle, stinkbug, and grasshopper are present, bean leaf beetle is causing the predominant amount of pod injury and damage at this point in the season. As a result of the leaves beginning to senesce, the last generation of bean leaf beetles will feed on soybean pods and will “scrape” the seed pods, scraping off the green tissue. This results in pod scarring, which allows an entry point for spores of various fungal diseases.

Late-planted or double crop beans should continue to be monitored for soybean rust, as positive confirmations continue to arise in states to our south. MU Plant Pathologist Laura Sweets notes that modelers do show a risk for soybean rust throughout the state and much of the Midwest, so there is a possibility that soybean rust could be confirmed in Missouri in 2007 yet. Regional MU Extension Agronomists continue to monitor local soybean fields for soybean rust. Since September 17th, twelve new counties in Arkansas were confirmed positive for soybean rust, with four of these confirmations on September 21st alone. Other positive confirmations have arisen in Oklahoma, Kentucky, Florida, Alabama, Mississippi, and South Carolina. The disease is expected to continue its spread northward and eastward.