Crop Update – Most corn fields in our area are in or past pollination. We had very good weather during pollination and continue to for the later fields, so kernel set should be quite high. For about two weeks after fertilization of the ovules, the plant will abort back enough kernels to allow it to fill the remaining kernels. If weather continues to be favorable, we should have very little abortion this year. Then we need good warm sunny days and cool nights to really fill the kernels. If we have hot nights, respiration will use up more products of photosynthesis and less will be deposited in the kernels. That is what happened in 1995. Things looked very good at the blister stage (R2), but then we had a few weeks of very warm nights and the state yield was well below the then record set in 1994.

Soybean – Most fields are well into the R2-R3 stage and even R4. R4 begins a critical time for soybean. R4 to R5.5 is when it is most sensitive to moisture stress. There have been multiple reports of finding soybean aphids, but to date, none that have reached economic threshold. The cooler, drier weather we have been experiencing can be ideal for soybean aphids, allowing populations to increase so you should continue to scout. Check for aphids on the youngest two or three trifoliate leaves and stems in the plant terminal. Scout 5 locations for each 20 acres. The Economic Injury Level is the point at which economic damage can occur, and is approximately 650 aphids per plant. The Economic Threshold is the point set below the economic injury level in order to prevent yield loss, also sometimes called the action threshold. Consider a foliar insecticide if there are 250 aphids per plant and populations are increasing on 80% of the plants. This threshold allows a 5-7 day lead time in order to make timely treatments to protect yield.

What is the harm of treating before reaching threshold for field crop pests? Your input costs may not be recovered and you will kill beneficial insects. Keep in mind beneficial insects control aphids at low to medium reproductive rates. They also help control other soft-bodied herbivores, such as twospotted spider mites and caterpillars. There are several beneficial insects in soybean that are natural predators of aphids. Adult and larval lady beetles (ladybugs), damsel bug nymphs and adults, insidious flower bugs, and green lacewing larvae. Learn what these insects look like, and look for them while you scout.

Dates
August 14, 2014 Soybean Aphid Field Day at FEEL- http://www.aep.iastate.edu/feel/aphid
This regional field day features key researchers and specialists participating in the North Central Soybean Research Program discussing ongoing research and recommendations for managing soybean aphid. There is no fee to attend but advance registration is requested to assist with facility and catering arrangements.