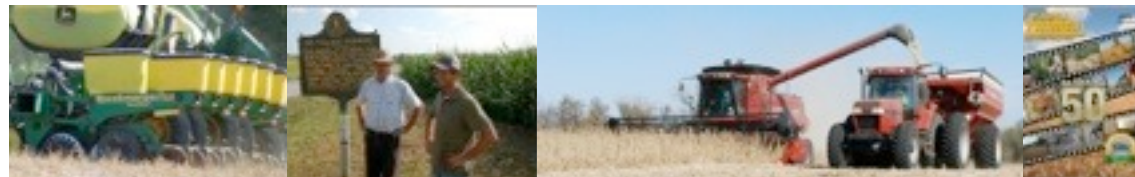


5th Annual Responsible Nutrient Management Practitioners Program

John Niemeyer, Cortland, Neb.

Grant Troop, Oxford, Pa.

Joel Armistead, Adairville, Ky.

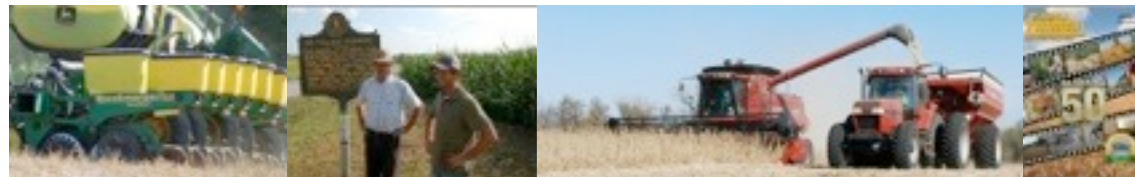


#1 Composted cattle manure makes
for a valuable nutrient source.
– John Niemeyer

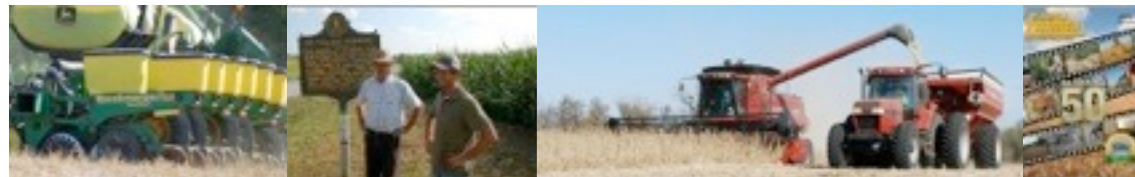


#2 Promote a highly active soil biology with high-residue management, cover crops and probiotic treatments.

– H. Grant Troop



#3 Replace anhydrous ammonia with 32% liquid nitrogen to protect operator, get better rate control and improve soil structure and micro-life.
– Joel Armistead



#4 Use variable-rate applications of lime, gypsum and other fertilizers.

– John Niemeyer



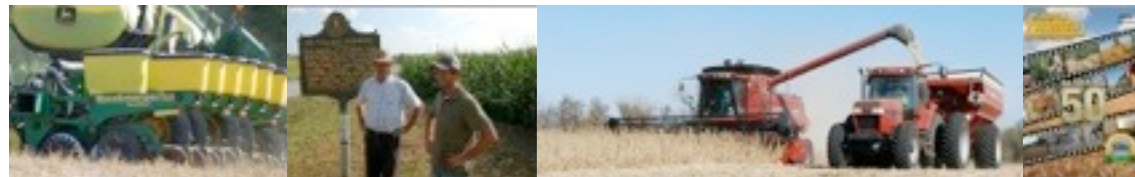
#5 Use nutrient sources that are
stable, seed safe and soil safe.

– H. Grant Troop



#6 Place 32% N beside the corn row
at planting time to reduce rates and
loss of N.

– Joel Armistead



#7 Apply anhydrous ammonia in the
spring rather than fall.

– John Niemeyer



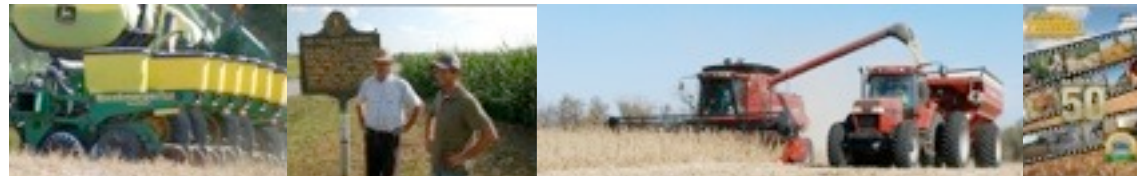
#8 Use the most efficient nutrient
placement scheme for each crop.
– H. Grant Troop

**NO-TILL
FARMER**



#9 Use row-placed P & K to increase fertilizer efficiency and uptake at reduced rates vs. dry fertilizers.

– Joel Armistead



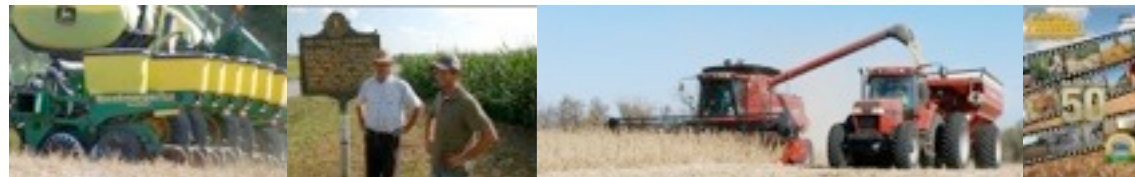
#10 Tissue test for in-season nitrogen management.

– John Niemeyer

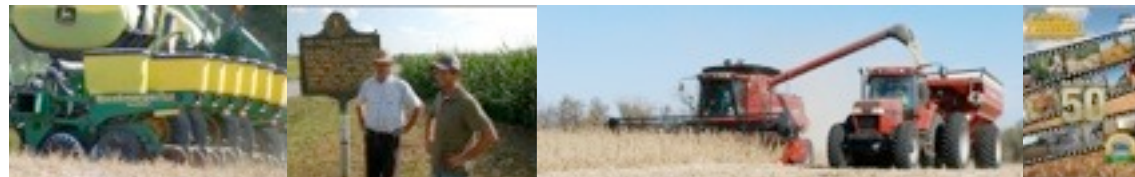


#11 Adjust nutrient rates to match soil tests, credits and placement scenarios.

– H. Grant Troop



#12 Use grid soil sampling to place
needed fertilizer in the right spot and
reduce total level of applied fertilizer.
– Joel Armistead



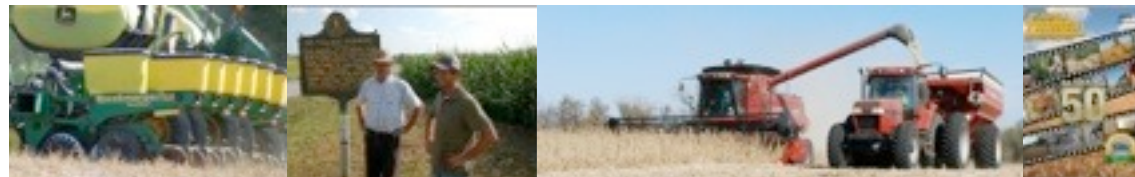
#13 Grid sample on a 4-year rotating basis.

– John Niemeyer



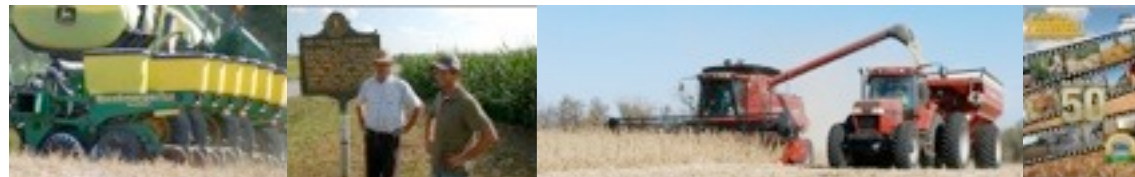
#14 Appropriately time nutrient applications to limit exposure to loss and increase crop nutrient uptake.
– H. Grant Troop

**NO-TILL
FARMER**



#15 Use variable-rate application equipment to put on the right amount of N, P & K in the right place and at the right time.

– Joel Armistead



Bonus #16 Experiment with cover
crops to see if you can reduce applied
nutrients.

– John Niemeyer



5th Annual Responsible Nutrient Management Practitioners Program

John Niemeyer, Cortland, Neb.

Grant Troop, Perryville, Md.

Joel Armistead, Adairville, Ky.

