

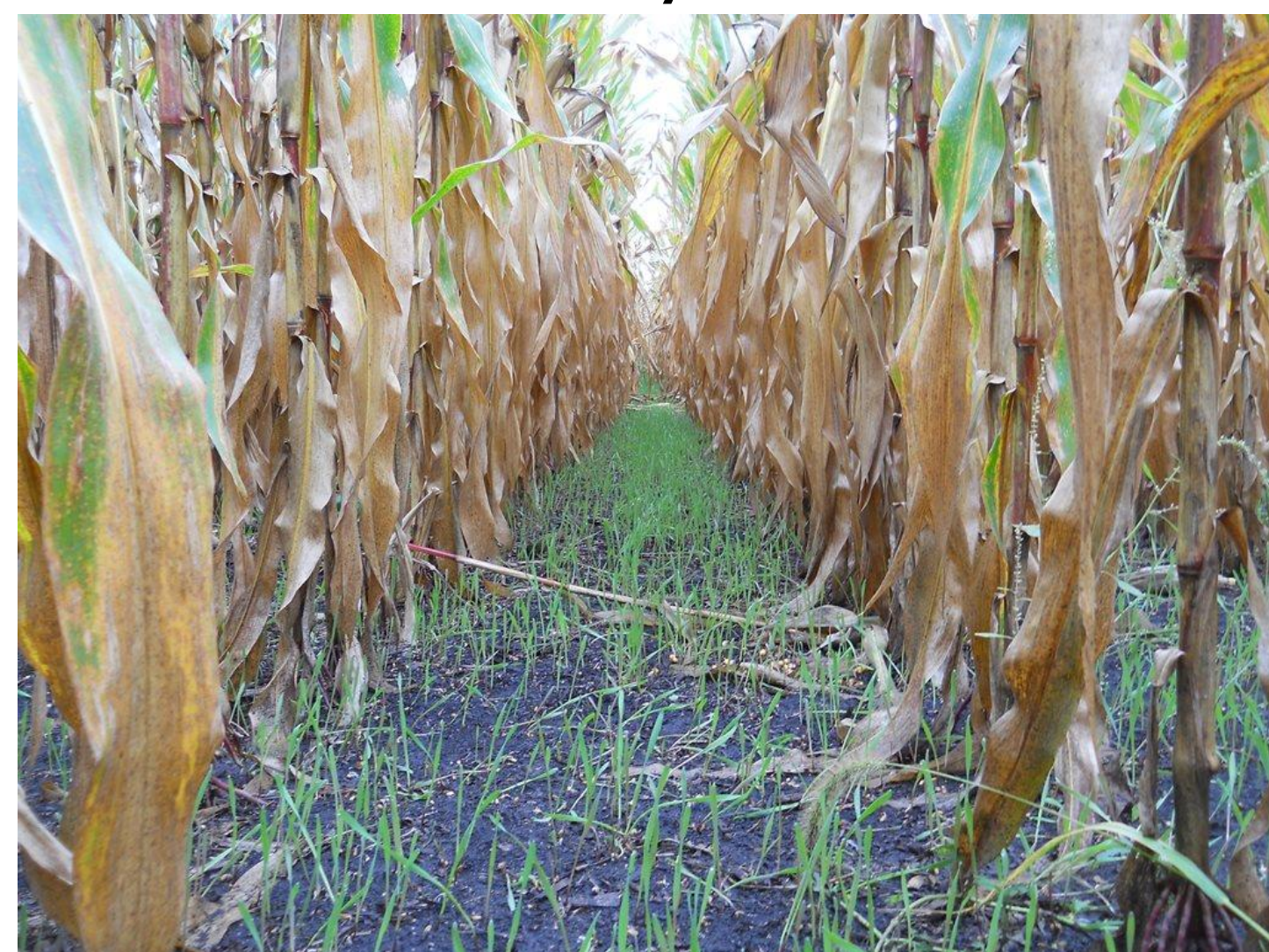
Developing Sustainable Roller Crimped Cover Cropping Systems for Corn and Soybean Production: Effects on Cover Crop Winter Hardiness, Biomass, N Mobilization, Weed Suppression and Yields

Cereal Rye Cover Crop

Day 2 (9/17/15)



Day 8



Anthesis (pollen shedding)



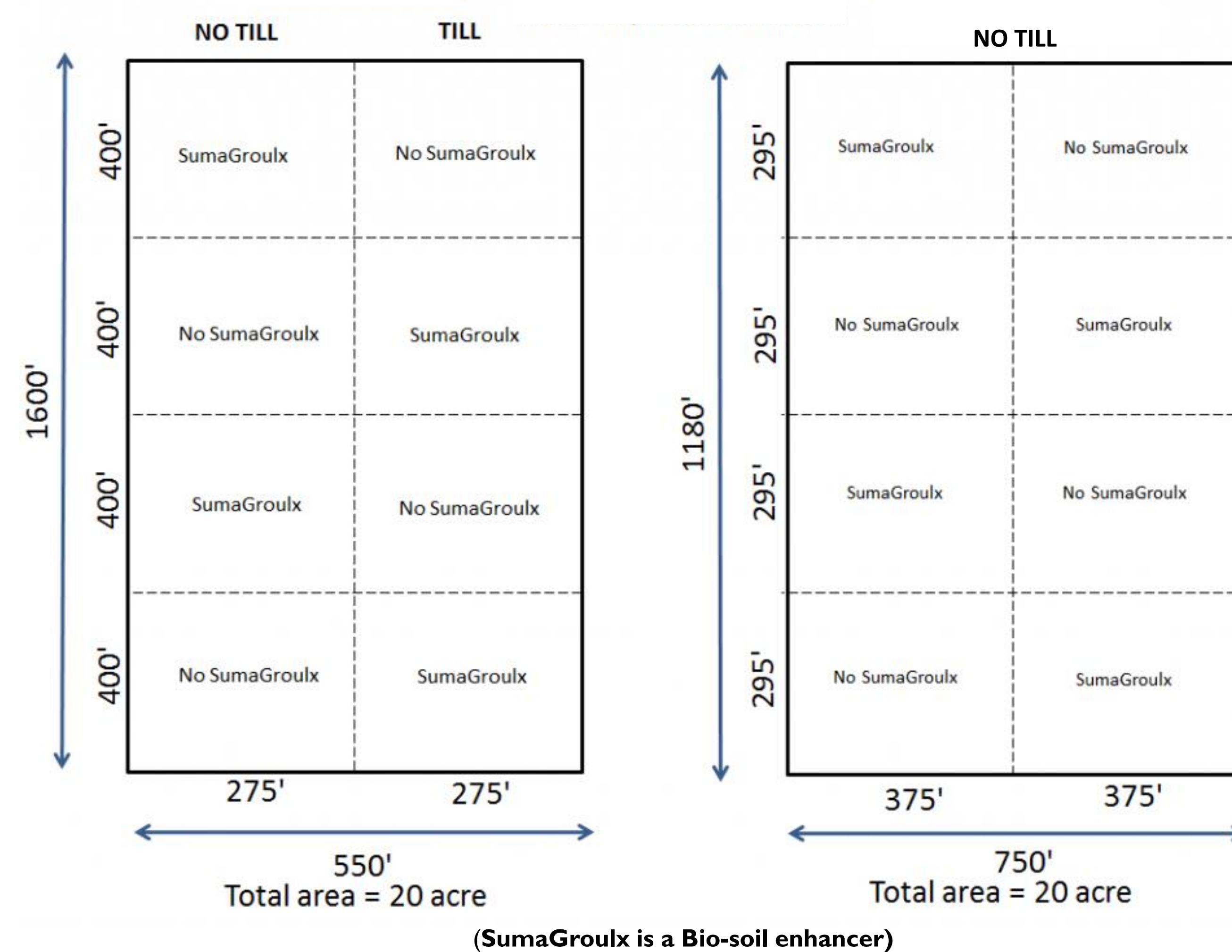
Roller Crimping (5/20/16)



Soybeans (7/11/16)



Research Plots on Two Farms



What We Learned

- Apply cover crop seed at a sufficient rate by mid-September
- Use early maturing cultivars to allow for timely cash crop planting
- Thick cover crops provide effective roller crimping and weed suppression
- Wait until full flowering for adequate roller crimping termination
- Have a back-up termination strategy ready for action
- The Bio-soil enhancer showed promise accelerating fall root growth
- Ineffective hairy vetch termination lowered corn yields and N mobilization on No-Till plots
- Soybean yields on both farms, No-till and Till, were well above organic County average

Hairy Vetch Cover Crop

Day 8 (9/25/16)

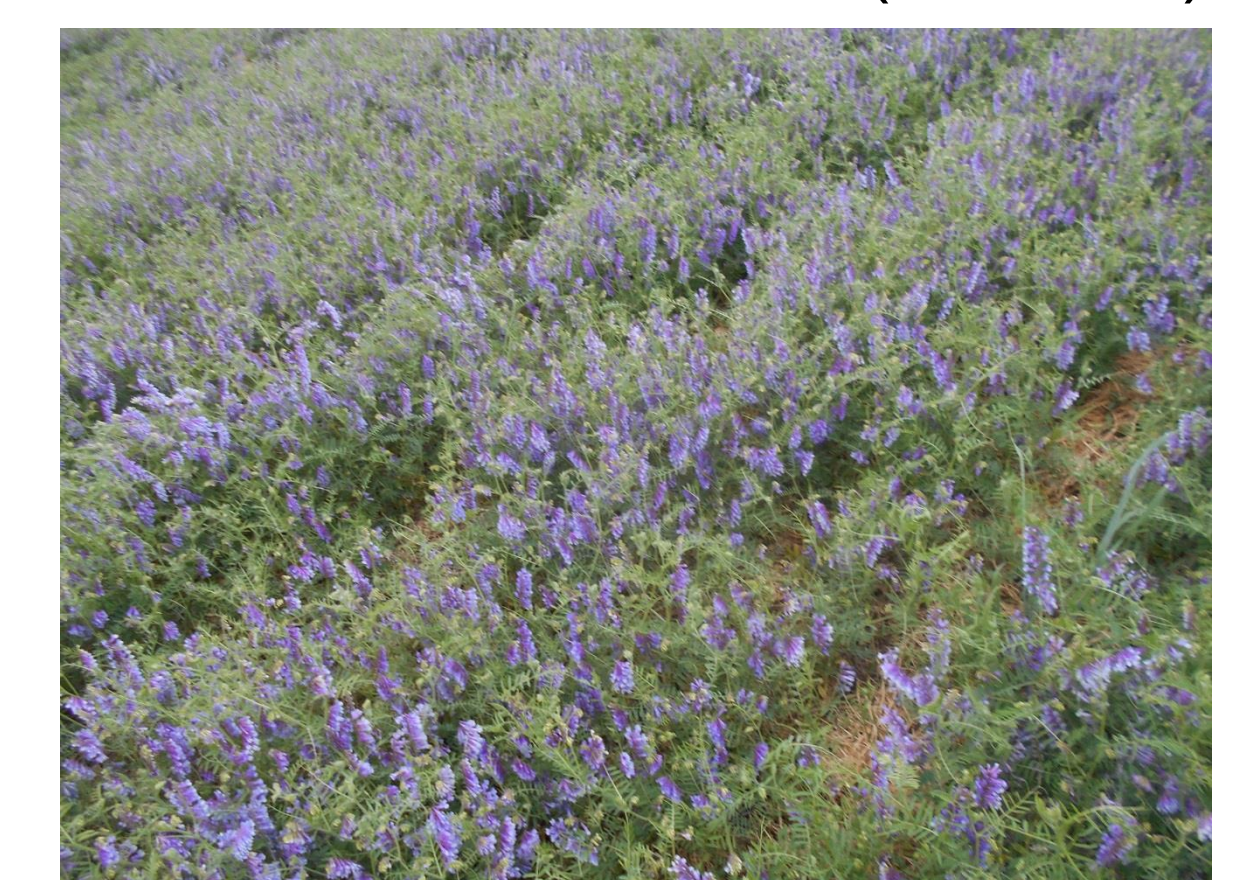


Hairy Vetch 10/31/16



Need 4" roots to overwinter

50% flower blossom (5/20/17)



Roller Crimping (5/26/17)



Corn (9/9/17)

