

Table 11: Cover crop, Population, Weed, and Yield Data: Corn Grain and Soybeans in 2011. “Standard Herbicide” (SH) and “Reduced Herbicide” (RH) Treatments.

Crop	Weed Density [€]	Crop Population	SE	Weed Biomass [€]	Cover Crop Biomass [£]	SE	Yield ^α	SE
Corn Grain								
		Plants/A		Lb/A			Bu/A	
SH	10117.3	30077	863	1.6	372.0	72.8	158.3	3.2
RH	52205.0*	28166	807	183.8*	423.0	70.0	168.9	9.4
Soybean								
SH	0	-----	-----	3.2	3126.4		56.7** [¥]	
RH	72439.5*	-----	-----	794.0*	3835.6*		47.5	

*- Value was statistically higher by weed management treatment.
 €- Weed data reflects resident weed density and biomass in the plots.
 £- Rye cover crop in corn grain terminated on the same date for both SH and RH treatments; rye terminated in RH soybeans on 5/19/11 and in SH soybeans on 5/6/11; rye in RH soybeans rolled with roller-crimper on 5/21/11.
 α- Volumetric yields are reported here at 15% moisture level for corn grain and 13% moisture for soybeans.
 ¥- These yields are in Bu/A when the crop is analyzed alone, with only main management as the treatment difference in the statistical model. When the entire rotation is analyzed, with crop included in the model, there was no difference in soybean yield between RH and SH treatments. Soybean dry weight yield was 2.78 Mg/ha for RH treatment and 3.34 Mg/ha in the SH treatment (SE= 0.25). Corn grain dry weight yield was 8.95 Mg/ha in RH corn and 8.39 Mg/ha in SH corn grain (SE= 0.25).