orn after a Rye Cover rop	All treatments planted with Rye		Rye cover crop terminated	All treatments planted with Corn	Corn silage harvested	
9/26/13	10/4/13	11/26/13	5/9/14	5/31/14	9/19/14	
Early Manure Application INJECTED BROADCASTED		Late Manure Application Injected Broadcasted				7
9/26/13	10/4/13	11/26/13	5/19/14	5/31/14	9/19/14	
Corn after Rye Silage Rye harvested as						

Fig. 7. Fall Manure Nutrient Conservation management strategy timeline.

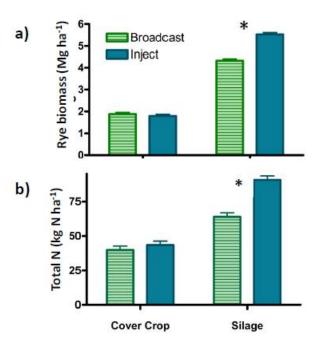


Fig. 8. Rye biomass (a) and total nitrogen content in rye biomass (b), managed as a cover crop or silage with broadcasted or injected manure. Values designated with an asterisk (*) differ at a p<0.05.

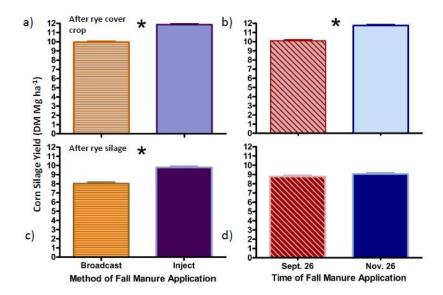


Fig. 9. Corn silage yields, (a) and (b) after a rye cover crop or after a rye silage (c) and (d). Method of application is compared (a) and (c) as well as time of application (b) and (d). Values designated with an asterisk (*) differ at a p<0.05.

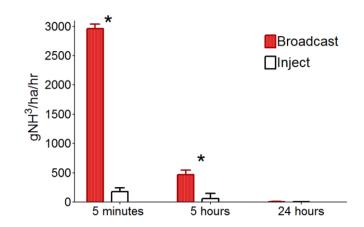


Fig. 10. Ammonia gas measurements taken on September26, 2013 approximately 5 minutes, 5 hours, and 24 hours after manure was either broadcasted or injected.

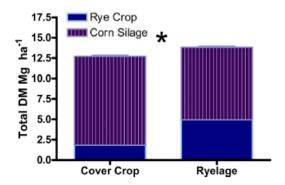


Fig. 11. Total dry matter biomass yields after a rye cover crop or after rye silage. Values designated with an asterisk (*) differ at a p<0.05.