

Table 5. Corn and soybean response to a cereal rye cover crop: yield, net margin and return on investment, 2022-2024.

Category	Corn				Soybean			
	2022	2023	2024	Mean	2022	2023	2024	Mean
Yield Response (RR)								
All sites								
Mean	0.983	0.938	0.995	0.977	0.972	0.993	0.997	0.987
Median	0.981	0.956	0.998	0.978	1.008	1.004	1.002	1.004
Max.	1.041	0.977	1.066	1.066	1.104	1.167	1.092	1.167
Min.	0.908	0.831	0.888	0.831	0.806	0.795	0.903	0.795
<i>n</i>	15	9	14	38	34	26	35	95
Upper quartile								
Mean	1.024	0.977	1.054	1.033	1.046	1.086	1.052	1.061
Median	1.016		1.054	1.036	1.036	1.074	1.048	1.057
Max.	1.041		1.066	1.066	1.104	1.167	1.092	1.167
Min.	1.016		1.041	1.008	1.032	1.056	1.032	1.032
<i>n</i>	3	1	4	11	9	7	9	24
Net Margin (\$/a)								
All sites								
Mean	-53.95	-81.10	-41.84	-55.92	-53.27	-41.82	-35.18	-43.47
Median	-49.13	-76.97	-35.54	-56.40	-25.95	-26.57	-39.10	-29.26
Max.	-5.20	-45.90	7.19	7.19	41.95	19.48	3.52	41.95
Min.	-120.19	-149.97	-113.90	-149.97	-183.75	-160.92	-69.70	-183.75
<i>n</i>	15	9	14	38	34	26	35	95
Upper quartile								
Mean	-15.76	-47.79	-0.59	-10.07	3.31	1.00	-6.37	-0.11
Median	-17.65	-47.79	-0.50	-12.29	-1.53	-1.55	-7.42	-1.82
Max.	-5.20	-45.90	7.19	7.19	41.95	19.48	3.52	41.95
Min.	-22.54	-49.68	-10.55	-22.54	-11.57	-7.18	-15.83	-11.90
<i>n</i>	4	2	4	10	9	7	9	24
Return to Cover Investment (\$/\$)								
All sites								
Mean	-1.63	-2.23	-1.14	-1.59	-1.45	-1.15	-1.02	-1.21
Median	-1.65	-2.08	-1.04	-1.66	-0.83	-0.93	-0.97	-0.96
Max.	-0.12	-1.52	0.22	0.22	1.54	0.44	0.14	1.54
Min.	-3.41	-4.14	-3.55	-4.14	-4.42	-4.11	-2.17	-4.42
<i>n</i>	15	9	14	38	34	26	35	95
Upper quartile								
Mean	-0.49	-1.59	0.00	-0.28	0.13	0.01	-0.21	-0.01
Median	-0.55	-1.59	0.02	-0.28	-0.06	-0.05	-0.28	-0.06
Max.	-0.12	-1.52	0.22	0.22	1.54	0.44	0.14	1.54
Min.	-0.73	-1.66	-0.27	-0.73	-0.37	0.20	-0.50	-0.40
<i>n</i>	4	2	4	10	9	7	9	24

Return to cover investment: \$ return to each \$1 spent, all cover crop costs.