

Table 6: Economic analysis and nitrogen use efficiency (NUE)

Site	Block	Year	Partial cost per acre	Yield (bu/acre)	Grain price (bu/acre)	Gross per acre	Partial net per acre	SAP net advantage per acre*	NUE (bu grain/lb N)
Site 1	BAU	2023	\$ 71.00	78.4	\$ 8.00	\$ 627.28	\$ 556.28		2.45
Site 1	SAP	2023	\$ 110.08	104.0	\$ 8.00	\$ 832.00	\$ 721.92	\$ 165.64	3.25
Site 1	BAU	2024	\$ 84.48	104.7	\$ 7.00	\$ 732.90	\$ 648.42		3.27
Site 1	SAP	2024	\$ 143.98	124.5	\$ 7.00	\$ 871.50	\$ 727.52	\$ 79.10	4.86
Site 1	BAU	2025	\$ 84.48	72.3	\$ 5.00	\$ 361.64	\$ 277.16		2.26
Site 1	SAP	2025	\$ 136.98	78.4	\$ 5.00	\$ 391.91	\$ 254.94	\$ (22.22)	3.50
Site 2	BAU	2024	\$ 150.45	122.50	\$ 4.95	\$ 606.38	\$ 455.93		2.25
Site 2	SAP	2024	\$ 128.71	122.5	\$ 4.95	\$ 606.38	\$ 477.67	\$ 21.74	3.01
Site 2	BAU	2025	\$ 168.75	107.1	\$ 5.05	\$ 540.91	\$ 372.16		2.09
Site 2	SAP	2025	\$ 143.16	107.1	\$ 5.05	\$ 540.91	\$ 397.75	\$ 25.59	2.61
Site 3	BAU	2023	\$ 58.89	53.6	\$ 13.80	\$ 44,364.24	\$ 44,305.35		8.37
Site 3	SAP	2023	\$ 117.39	47.7	\$ 13.80	\$ 39,520.44	\$ 39,403.05	\$ (4,902.30)	3.59
Site 3	BAU	2024	\$ 166.48	39.4	\$ 13.80	\$ 32,590.08	\$ 32,423.60		3.08
Site 3	SAP	2024	\$ 176.43	75.4	\$ 13.80	\$ 62,422.92	\$ 62,246.49	\$ 29,822.89	3.83
Site 3	BAU	2025	\$ 112.96	45.9	\$ 13.80	\$ 37,963.80	\$ 37,850.84		2.87
Site 3	SAP	2025	\$ 178.41	66.4	\$ 13.80	\$ 54,954.36	\$ 54,775.95	\$ 16,925.11	1.83

* SAP net advantage per acre = partial net per acre SAP - partial net per acre BAU

Partial cost represents expenses for ammendments and herbicides, application cost is not included.

Sap plots had one to three additional applications depending on the site and year

Sap analysis was \$85 per set of samples (old and new leaves), and an additional \$25 for recommendations.

Tissue test was \$30 per sample.