

Supplementary Material

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Table S1. Total stem length (cm), total plant dry weight (g), harvest index (HI), starch content (%) and starch yield (t ha^{-1}) at harvest 1 (8 months growth) and at harvest 2 (10 months growth) in response to five fertiliser treatments (N-P₂O₅-K₂O, kg ha^{-1}), T₁ 0-0-0, T₂ 40-20-0, T₃ 40-20-40, T₄ 40-20-80 and T₅ 40-20-120. Means are followed by standard errors (n = 3). A two-way-Anova was done considering both harvests and treatments T2-T5 only; exclusion of treatment T1 renders this a comparison of the K effect only. Values within a column and within a harvest followed by different letters are significantly different ($P < 0.05$).

Treatment	Total stem length (cm)	Total plant dry weight (g)	Harvest index HI	Starch content (%)	Starch yield (t ha^{-1})
Harvest 1					
T ₁	411 ± 62.3	1416 ± 284.5	0.69 ± 0.007	29.1 ± 1.18	7.1 ± 1.50
T ₂	581 ^a ± 51.8	1718 ^a ± 125.7	0.69 ^a ± 0.006	28.8 ^a ± 0.66	8.7 ^a ± 0.74
T ₃	609 ^a ± 60.7	1756 ^a ± 6.0	0.72 ^a ± 0.014	30.7 ^a ± 0.79	8.9 ^a ± 0.65
T ₄	753 ^a ± 52.3	2243 ^a ± 92.4	0.71 ^a ± 0.005	29.3 ^a ± 1.08	11.9 ^{ab} ± 0.53
T ₅	699 ^a ± 62.0	2331 ^a ± 214.0	0.72 ^a ± 0.030	29.0 ^a ± 0.24	12.4 ^b ± 0.85
Harvest 2					
T ₁	729 ± 118.9	2127 ± 319.5	0.75 ± 0.023	34.6 ± 0.50	10.9 ± 1.46
T ₂	636 ^a ± 66.5	2176 ^a ± 85.8	0.77 ^a ± 0.007	33.5 ^b ± 0.47	11.6 ^a ± 0.52
T ₃	810 ^a ± 142.0	2473 ^a ± 153.1	0.75 ^a ± 0.012	34.5 ^b ± 0.10	12.7 ^a ± 0.64
T ₄	746 ^a ± 129.8	2260 ^a ± 244.9	0.75 ^a ± 0.006	32.4 ^{ab} ± 0.98	11.7 ^a ± 1.38
T ₅	742 ^a ± 75.6	2560 ^a ± 409.0	0.79 ^a ± 0.020	30.3 ^a ± 1.00	13.4 ^a ± 2.28
Treatment (T)	P = 0.384	P = 0.059	P = 0.253	P = 0.015	P = 0.075
Harvest (H)	P = 0.234	P = 0.010	P < 0.001	P < 0.001	P = 0.019
T × H	P = 0.638	P = 0.236	P = 0.273	P = 0.189	P = 0.234

Table S2. Potassium (K) concentrations ($\mu\text{g g}^{-1}$ dry weight) of different plant parts: leaf blades, petioles, upper stem, lower stem, roots and senesced leaves at harvest 1 (8 months growth) and at harvest 2 (10 months growth) in response to five fertiliser treatments ($\text{N-P}_2\text{O}_5\text{-K}_2\text{O}$, kg ha^{-1}), T₁ 0-0-0, T₂ 40-20-0, T₃ 40-20-40, T₄ 40-20-80 and T₅ 40-20-120. Means are followed by standard errors (n=3). Two-way-Anovas were done considering both harvests and all treatments (T1-T5) or treatments T2-T5 only. ND = not determined.

Treatment	Leaf blades	Petioles	Upper stem	Lower stem	Roots	Senesced leaves
Harvest 1						
T ₁	8970 ± 827	3067 ± 766	5427 ± 1008	7479 ± 1594	6985 ± 674	2374 ± 319
T ₂	7888 ± 662	2768 ± 98	3727 ± 282	7668 ± 1168	6526 ± 534	3423 ± 679
T ₃	8930 ± 154	3936 ± 1207	3892 ± 459	8045 ± 1496	6457 ± 545	2826 ± 239
T ₄	8180 ± 491	2594 ± 418	4124 ± 1113	6851 ± 864	6734 ± 286	4542 ± 798
T ₅	8612 ± 627	4147 ± 795	3915 ± 802	9491 ± 1245	8007 ± 661	4619 ± 523
Harvest 2						
T ₁	7565 ± 645	2710 ± 215	3121 ± 713	5471 ± 248	6099 ± 409	ND
T ₂	6628 ± 281	2429 ± 235	3966 ± 783	4899 ± 142	5936 ± 393	
T ₃	6172 ± 455	2469 ± 240	3738 ± 494	5048 ± 46	5850 ± 430	
T ₄	7199 ± 769	2677 ± 282	4019 ± 244	6365 ± 580	6523 ± 176	
T ₅	7312 ± 838	2624 ± 264	4958 ± 570	7674 ± 742	7058 ± 731	
Treatment (T)	P = 0.405	P= 0.807	P = 0.872	P = 0.082	P = 0.076	
Harvest (H)	P < 0.001	P= 0.033	P = 0.564	P = 0.002	P = 0.050	
T x H	P = 0.526	P= 0.624	P = 0.213	P= 0.621	P = 0.945	
ANOVA Without T1						
Treatment (T)	P = 0.629	P = 0.734	P= 0.790	P =0.064	P = 0.064	
Harvest (H)	P = 0.001	P = 0.041	P = 0.605	P =0.005	P = 0.127	
T x H	P = 0.395	P = 0.594	P = 0.806	P = 0.476	P = 0.913	

