

Supplementary Materials

Table S1. Mean performance of BAU sweetpotato-5 for morphological traits under three treatments ($T_0 = 321.8 \text{ kg MoP ha}^{-1}$, $T_1 = 160.8 \text{ kg MoP ha}^{-1}$ and $T_2 = 0.0 \text{ kg MoP ha}^{-1}$).

reatment	Number of leaves				Vine length				NB	SD	FWP	TL	TD	TW	NTP
	30 DAP	60 DAP	90 DAP	115 DAP	30 DAP	60 DAP	90 DAP	115 DAP							
T_0	11.10	51.95	82.60	98.95	21.83	75.00	102.85	121.40	3.65	0.87	508.75 a	17.77	6.05	302.76	6.75 a
T_1	8.30	41.65	82.95	108.25	22.90	58.15	80.91	107.65	2.85	0.74	296.22 ab	18.06	5.02	239.39	5.50 ab
T_2	8.75	48.45	80.65	99.20	23.55	71.40	95.30	110.10	3.25	0.76	261.87 b	14.77	4.67	183.18	4.75 b

Here, DAP: days after transplanting, NB: number of branches, SD: stem diameter (cm), FWP: fresh weight plant⁻¹ (g), TL: tuber length (cm), TD: tuber diameter (cm), TW: tuber weight (g), and NTP: number of tubers plant⁻¹.

Table S2. Mean performance of BAU sweetpotato-5 for biochemical traits under three treatments ($T_0 = 321.8 \text{ kg MoP ha}^{-1}$, $T_1 = 160.8 \text{ kg MoP ha}^{-1}$ and $T_2 = 0.0 \text{ kg MoP ha}^{-1}$).

Treatment	Chlorophyll content	TPC (mg 100g ⁻¹)	Vit-C (mg 100g ⁻¹)	Carotenoid (mg 100g ⁻¹)	Anthocyanin (mg 100g ⁻¹)	Glucose	Fructose	Sucrose	Zn (mg kg ⁻¹)	Fe (mg kg ⁻¹)
T_0	41.5 a	12.52 b	13.24 b	0.171 a	3.91 a	5.85	5.43	5.91	7.55 c	118.12 a
T_1	38.15 ab	13.77 ab	16.95 a	0.094 b	2.82 b	5.88	5.55	4.98	10.71 a	62.92 c
T_2	32.38 b	18.25 a	19.23 a	0.110 b	2.52 b	6.55	4.20	4.18	9.15 b	114.59 b

Here, TPC: total phenolic content, Vit-C: vitamin C.

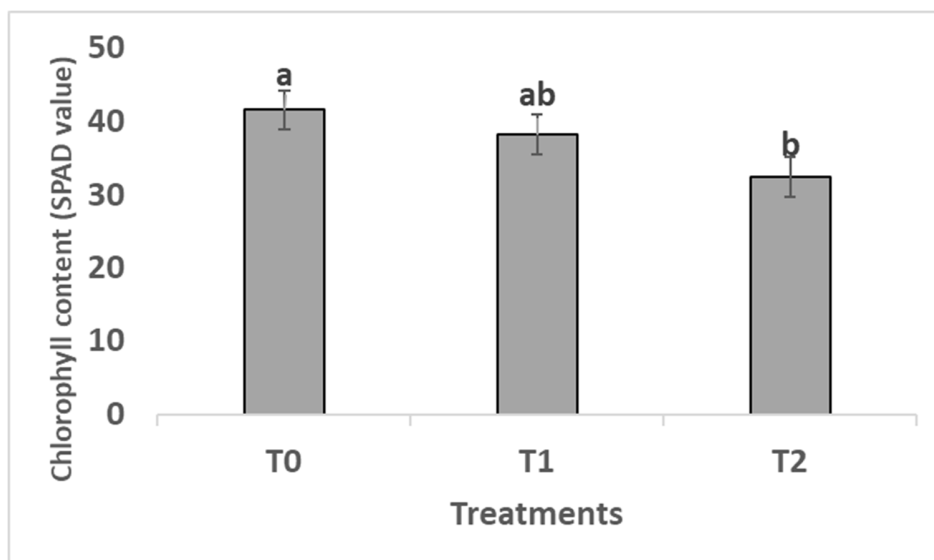


Figure S1. Variation among three treatments ($T_0 = 321.8 \text{ kg MoP ha}^{-1}$, $T_1 = 160.8 \text{ kg MoP ha}^{-1}$ and $T_2 = 0.0 \text{ kg MoP ha}^{-1}$ for leaf chlorophyll content (SPAD value).

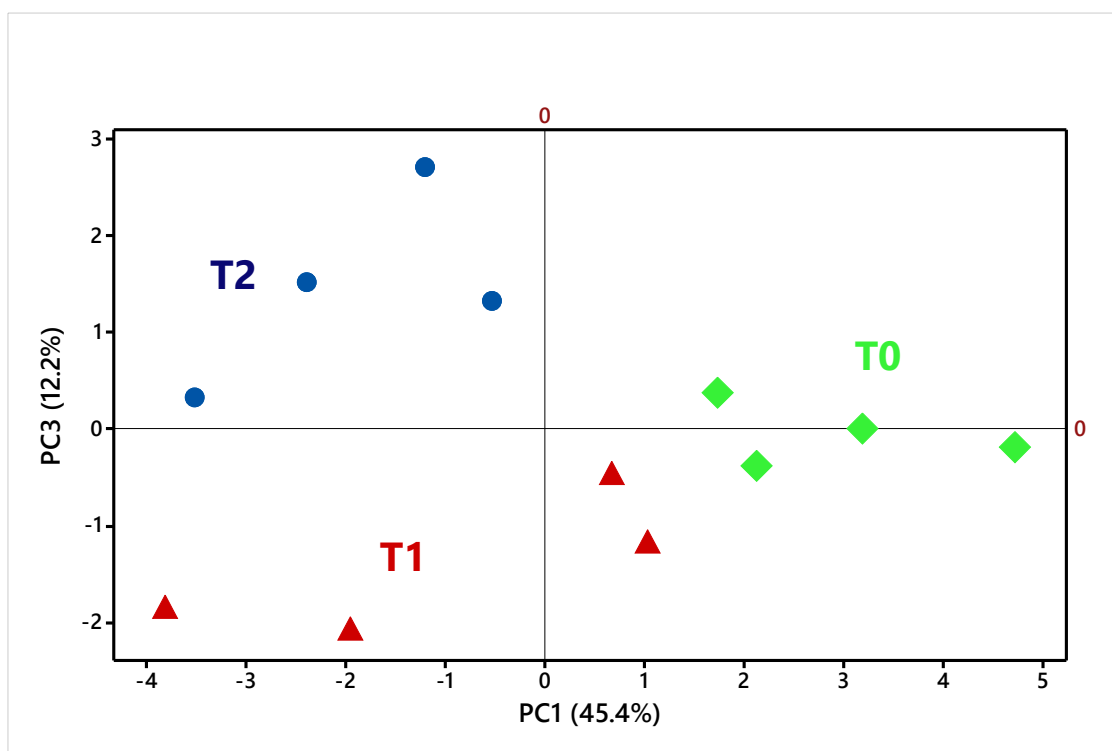


Figure S2. Scatterplot of PC1 and PC3 showing differences among treatments