

Table 1 The vitamin contents of the packaged and stored plantain flour compared with the baseline

Packaging Material	Vitamin A	Vitamin B6	Vitamin B9
Baseline	7692.74 ± 13.03 ^c	24.51 ± 0.54 ^e	55.63 ± 1.33 ^e
TLP	4147.03 ± 99.33 ^b	6.15 ± 0.10 ^a	22.50 ± 0.54 ^c
THP	3929.31 ± 94.11 ^b	9.72 ± 0.19 ^e	26.09 ± 0.63 ^d
BLP	4033.99 ± 96.59 ^b	8.78 ± 0.16 ^b	15.23 ± 0.37 ^b
BHP	3587.18 ± 85.92 ^a	10.77 ± 0.21 ^d	11.94 ± 0.29 ^a

Note: Means followed by the same superscript letter within the same column are not significantly different ($P > 0.05$) according to Duncan's multiple range test. TLP: Transparent Low-Density Polyethylene, THP: Transparent High-Density Polyethylene, BLP: Black Low-Density Polyethylene, BHP: Black High-Density Polyethylene

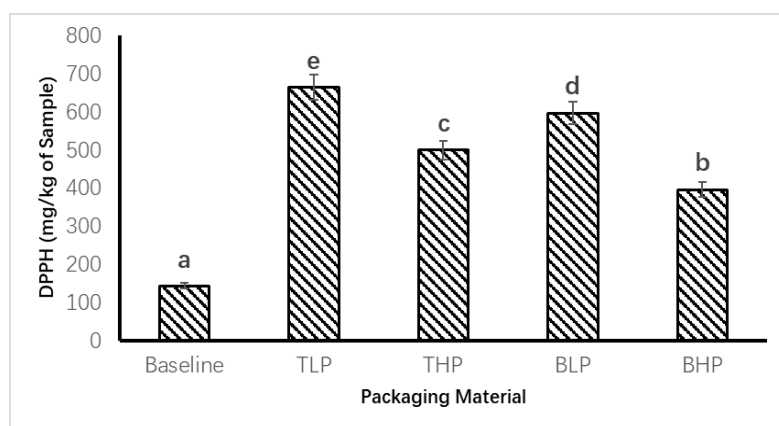


Figure 1 The DPPH content of the packaged and stored plantain flour compared with the baseline

Image caption: Bars with the same superscript letter are not significantly different ($P > 0.05$) according to Duncan's multiple range test. TLP: Transparent Low-Density Polyethylene, THP: Transparent High-Density Polyethylene, BLP: Black Low-Density Polyethylene, BHP: Black High-Density Polyethylene

The phenolic content of the stored flour varied across the packing material and was significantly lower when compared with the phenolic content of the baseline (flour before packaging and storage). At 4 weeks of storage, flour stored in TLP, THP, BLP and BHP recorded values of 36.86, 54.98, 44.23 and 66.34 mg/kg respectively (Figure 2).

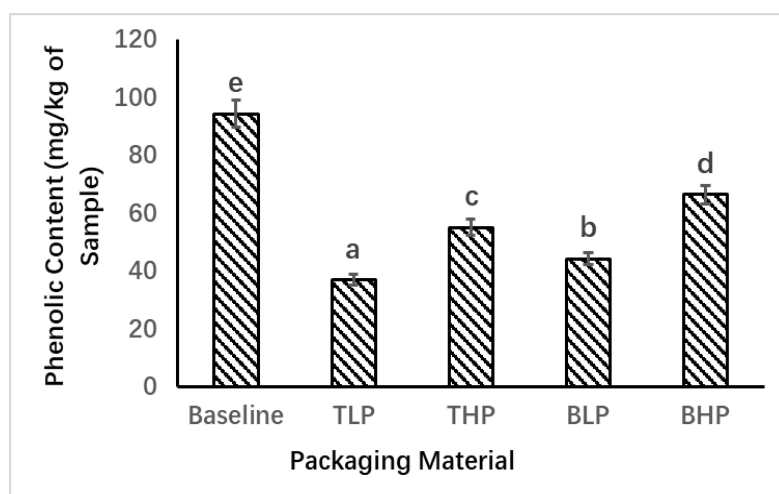


Figure 2 The Phenol content of the packaged and stored plantain flour compared with the baseline

Image caption: Bars with the same superscript letter are not significantly different ($P > 0.05$) according to Duncan's multiple range test. TLP: Transparent Low-Density Polyethylene, THP: Transparent High-Density Polyethylene, BLP: Black Low-Density Polyethylene, BHP: Black High-Density Polyethylene