



Non-parametric analysis of pairwise dissimilarities (PERMANOVA results)

Source of variance	Df	SS	MS	F	R ²	P
Soil type	3	1.1	0.4	6.6	0.55	0.001
Residuals	16	3.3	0.1		0.45	
Total	19	3.4			1	

Abbreviations: Df, degrees of freedom; F, F-test statistic; MS, mean squares; P, proportion of randomization trials with more extreme values of F; R, variation explained; SS, sums of squares.

Multiple comparisons (P-values, Benjamini-Hochberg discovery rate corrected)

	FN	FO	LB
FO	R ² =0.29; P=0.03	-	
LB	R ² =0.52; P=0.01	R ² =0.52; P=0.01	-
LR	R ² =0.47; P=0.01	R ² =0.40; P=0.01	R ² =0.38; P=0.01

Supplementary data Fig. S4. PCoA of soil bacterial communities at pre-planting, using weighted UniFrac distances, and PERMANOVA tables. P-values were obtained after correction for multiple comparisons using Benjamini-Hochberg discovery rate. LB, Limpopo black; LR, Limpopo red; FN, Free State new; FO, Free State old.