



Non-parametric analysis of pairwise dissimilarities (PERMANOVA results)

Source of variance	Df	SS	MS	F	R ²	P
Soil type	3	91.8	30.6	11.9	0.7	0.001
Residuals	16	41.2	2.6		0.3	
Total	19	133.0			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	0.01	-	
LB	0.01	0.01	-
LR	0.01	0.01	0.01

Supplementary data Fig. S2. PCoA of soil parameters at pre-planting, using Euclidean distances with standardized data, 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.