Figure S1: Nonmetric multidimensional scaling (nMDS) ordination plot, based on Bray-Curtis similarity indices calculated from presence/absence data of 16S rDNA TRFs abundance from above water table (oxic) zones showing variation based on age of drainage.

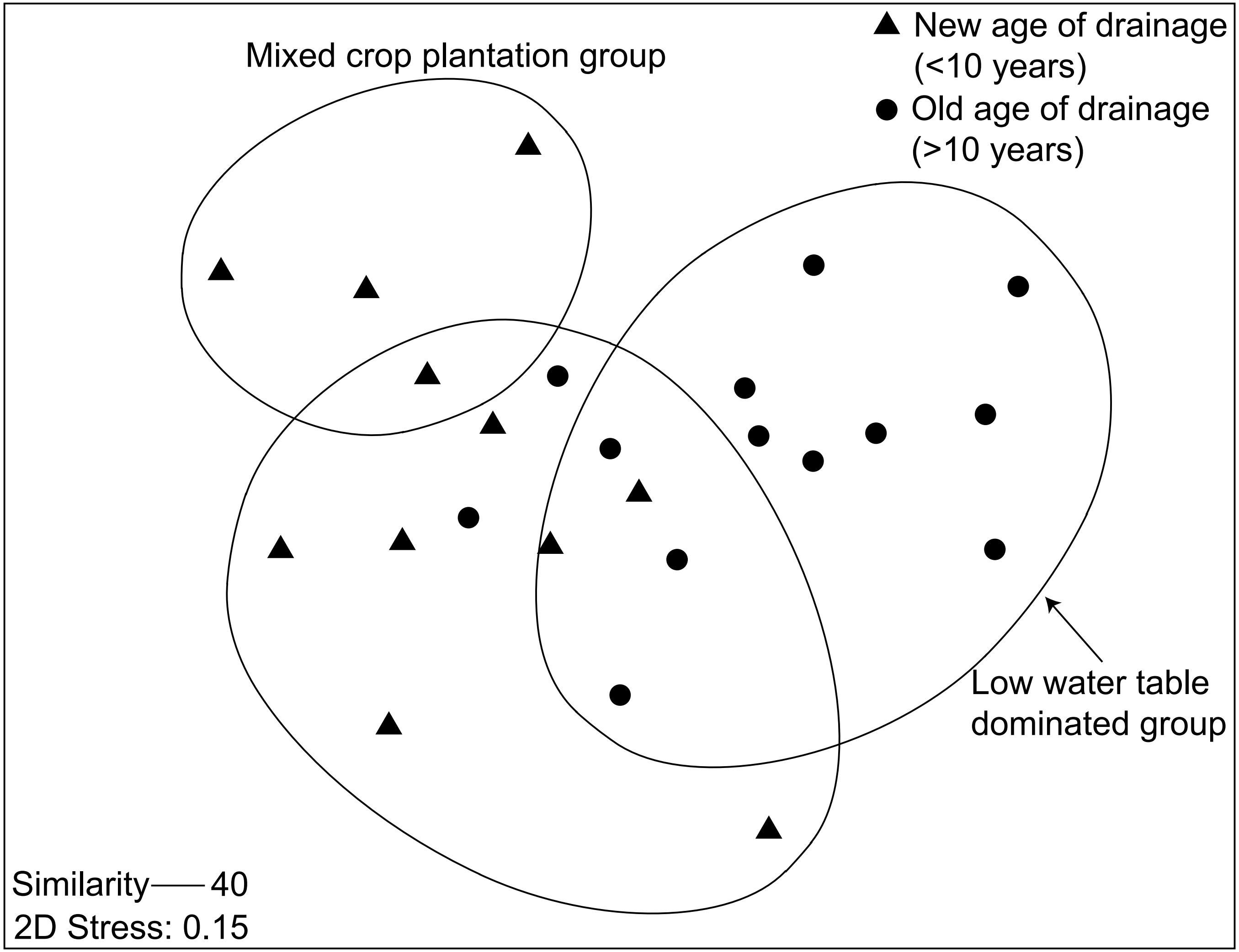

Figure S2: Relative abundance of bacterial population from high water table (HWT) and low water table (LWT) sites based on phylogenetic assignation using FRAGSORT at A) above water table (oxic) zones and B) below water table (anoxic) zones

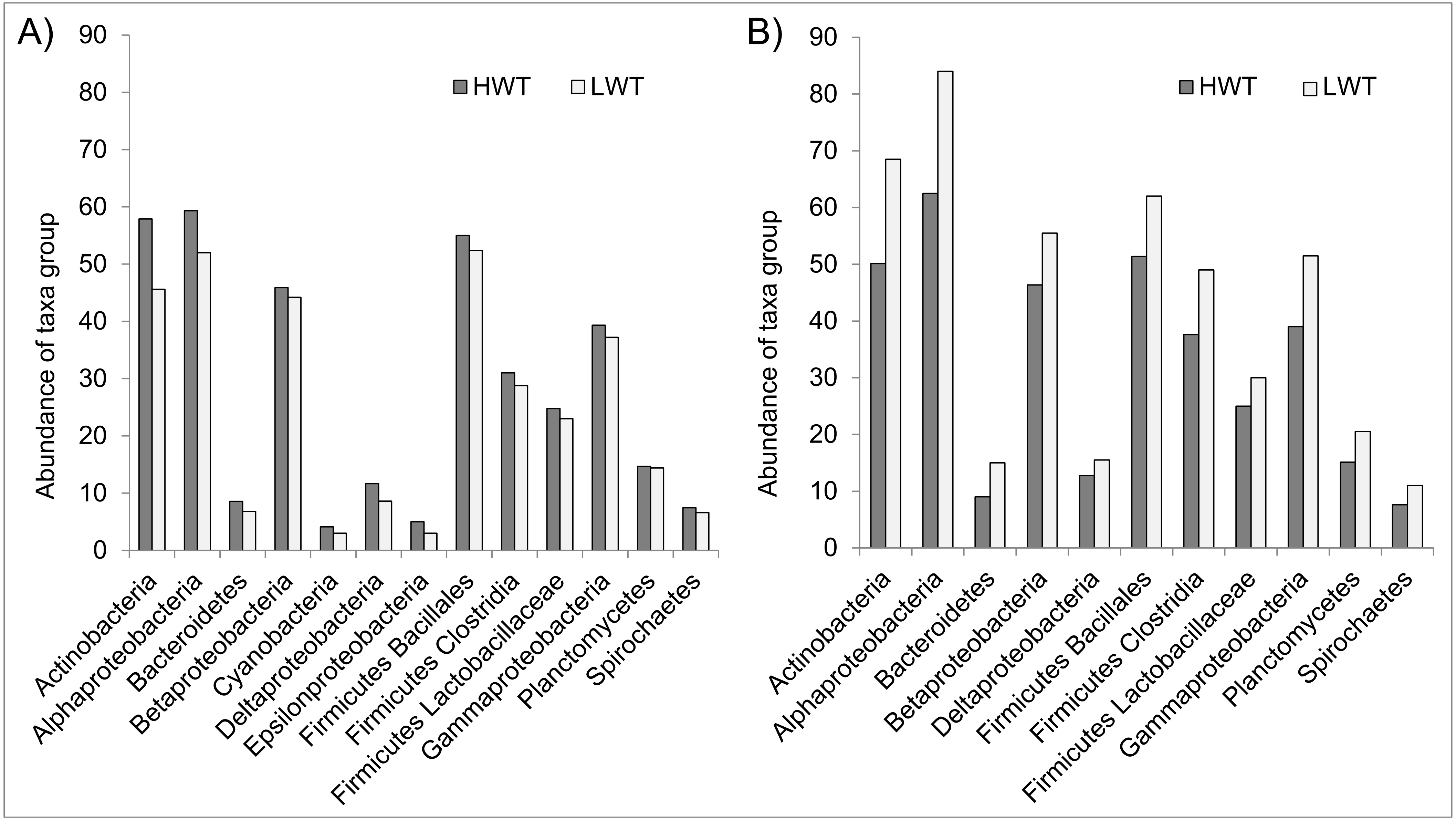

Table S1: Relationship between the bacterial community structure and geochemical parameters as revealed by canonical correspondence analyses and Monte Carlo permutation tests performed separately for 16S rDNA gene-based T-RFLP data sets and geochemical data. * represents $p<0.05$ and ** represents $p<0.01$.

Sampling zones	**Monte Carlo permutation test of canonical axes**	**Percentage variance of bacterial community-environment relation**		**Bacterial community-environment correlation / Eigen values**	
		Canonical axis 1	Canonical axis 2	Canonical axis 1	Canonical axis 2
Above water table (oxic) zones	*	21.1	14.7	0.978 / 0.366	0.945 / 0.256
Below water table (anoxic) zones	**	17.6	14	0.980 / 0.362	0.979 / 0.289