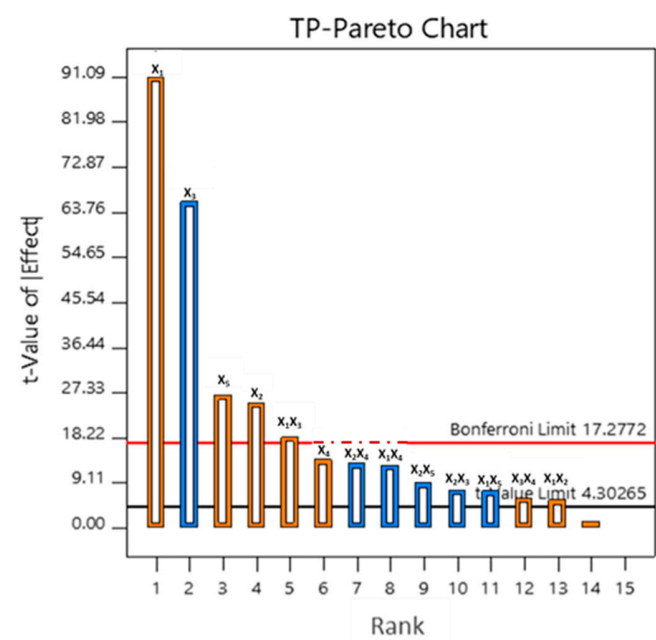# Supplementary Material

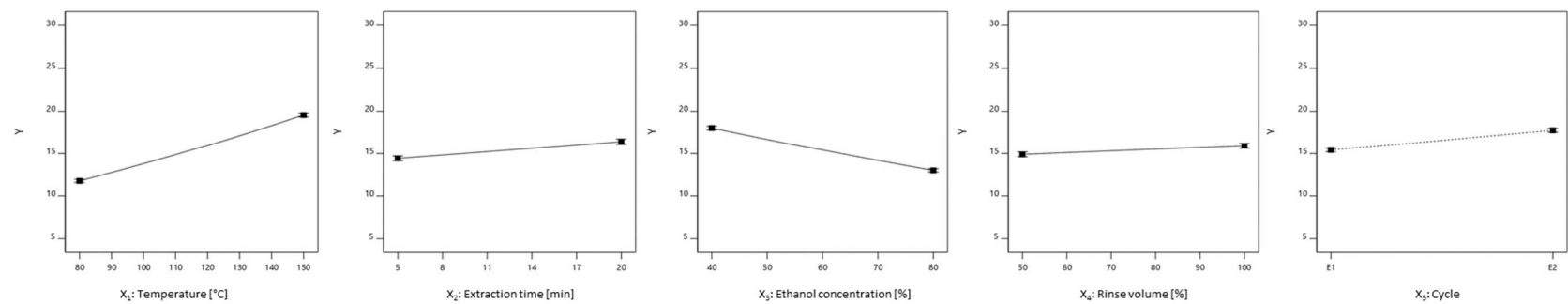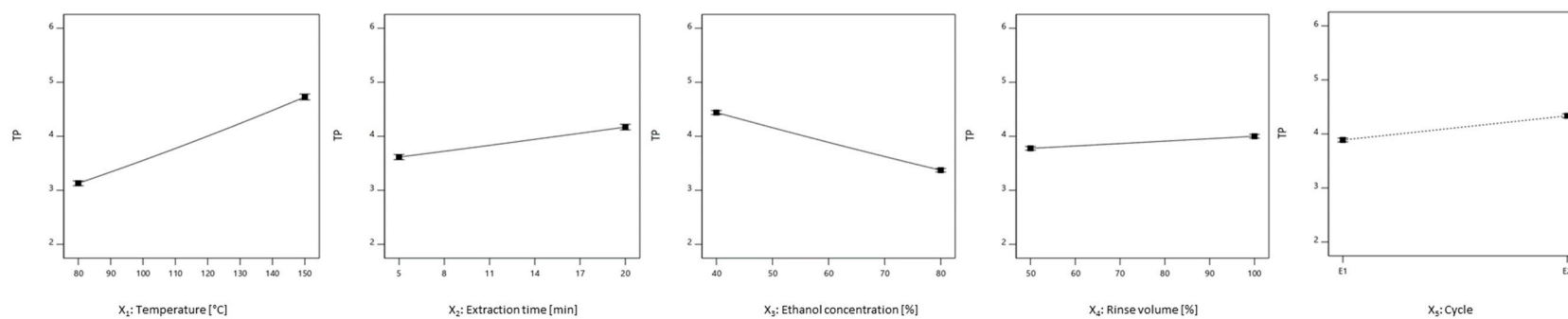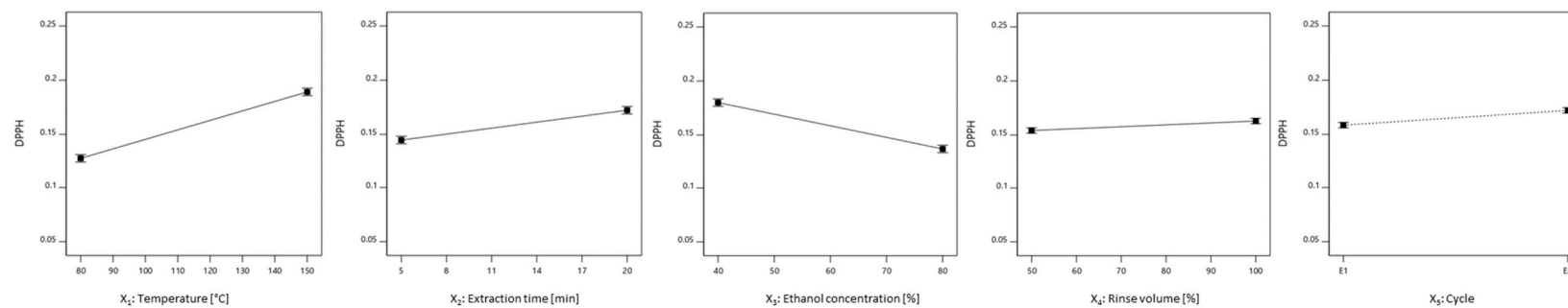**Figure S1.** Pareto chart exhibiting effects of five PLE variables on TP
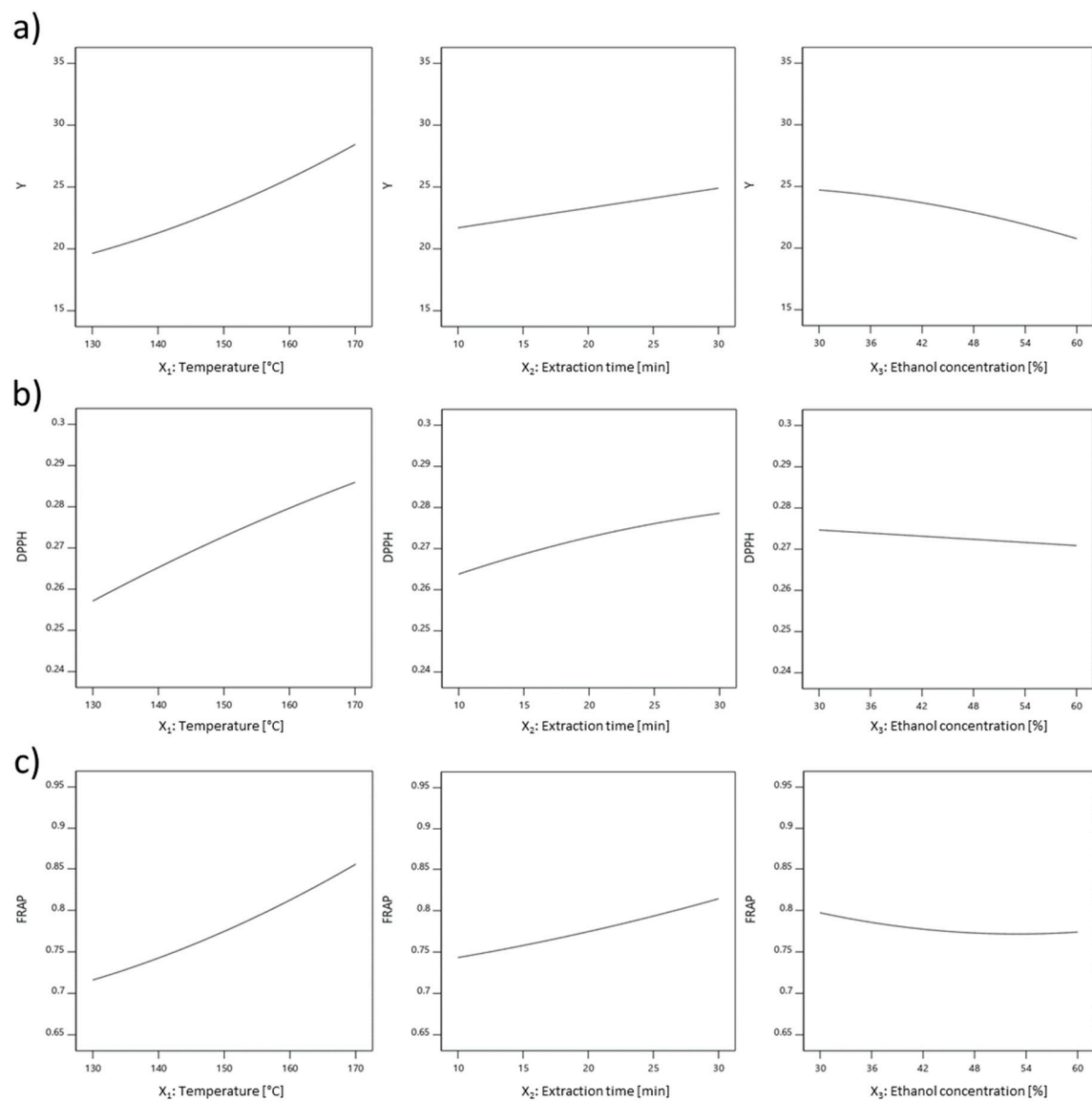

Figure S2. Influence of temperature, extraction time, ethanol concentration, rinse volume and number of cycles on Y

Figure S3. Influence of temperature, extraction time, ethanol concentration, rinse volume and number of cycles on TP

Figure S4. Influence of temperature, extraction time, ethanol concentration, rinse volume and number of cycles on DPPH

Figure S5. Effects of temperature, extraction time and ethanol concentration on **a**) Y, **b**) DPPH and **c**) FRAP

Table S1. Significance of linear, cross product and quadratic terms on Y, TP, DPPH, FRAP and ABTS.

Coefficients	Y	TP	DPPH	FRAP	ABTS
			p-value		
Linear					
X_1-Temperature	<0.0001 *	<0.0001 *	<0.0001 *	0.0001 *	<0.0001 *
X_2-Extraction time	<0.0001 *	0.0019 *	0.0035 *	0.0102 **	0.0539
X_3-Ethanol concentration	<0.0001 *	0.3289	0.3728	0.3249	0.1198
Cross product					
X_1X_2	0.0074 *	-	0.6025	0.2181	0.3366
X_1X_3	0.0224 **	0.5095	0.3822	0.1957	-
X_2X_3	-	-	-	0.3691	0.1840
Quadratic					
X_1^2	0.0086 *	0.2149	0.7356	0.6131	-
X_2^2	-	0.0377 **	0.6720	0.8480	0.3092
X_3^2	0.0326 **	0.0608	-	0.6226	0.1342

*$p < 0.01$ – significant

**$0.01 < p < 0.05$ – moderately significant