

Table S1. Coefficients of regression of third order model for the variables response of factorial design for the analysis of RSM for COLO seed PLE-extracts.

Coefficient/Factor	Extraction yield		Total Phenols Content		Antioxidant activity TEAC		Antioxidant activity EC ₅₀	
	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value
a	-4.8849		54.3215		1.03993		231.458	
b/T	-0.1748	0.0009*	-0.7268	0.0003*	-0.0137	0.0016*	3.6918	0.0000
c/Solvent	0.3880	0.0014*	0.0754	0.0339*	0.0029	0.1967	-7.1646	0.0000
d/cycles	17.0561	0.3389	-12.1542	0.7136	-0.2629	0.8348	-0.7158	0.0000
e/T ²	0.0024	0.0335*	0.0039	0.0001*	0.00007	0.0015*	-0.0217	0.0000
f/(solvent) ²	-0.0032	0.0225*	0.0017	0.0127*	0.00006	0.0085*	-0.0102	0.0000
g/(Cycles) ²	0.0159	0.7758	-0.0487	0.0991	-0.0012	0.1626	0.1237	0.0000
h(TxSolvent)	-0.0026	0.0861	-0.0018	0.0217*	-0.00008	0.0060*	0.0710	0.0000
i(Txcycles)	-0.0091	0.8915	-0.0128	0.6838	-0.0003	0.7317	0.48	0.0000
J(solventxcycles)	-3.9982	0.2599	4.4375	0.0254*	0.1075	0.0694	-12.87	0.0000
R2	93.921		96.8662		94.424		84.1912	
R2 adjusted	84.8026		92.1654		86.061		60.478	
Pure error**	3.1223		1.6208		0.0456		38.3541	

*Statistically significant values: p < 0.05

** Mean Square

Table S2. Coefficients of regression of third order model for the variables response of factorial design for the analysis of RSM for COLO pods PLE-extracts.

Coefficient/Factor	Extraction yield		Total Phenols Content		Antioxidant activity TEAC		Antioxidant activity EC ₅₀	
	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value
a	-2.5593		137.054		6.1732		284.13	
b/T	0.0195	0.0000*	-1.9176	0.0001*	-0.0713	0.0036*	0.7255	0.0110*
c/Solvent	0.2174	0.0000*	-0.9562	0.0462*	-0.0269	0.0233*	-3.4433	0.4276
d/cycles	2.8607	0.0002*	0.6222	0.7110	-1.4712	0.4961	113.287	0.8952
e/T ²	0.0007	0.0024*	0.0098	0.0008*	0.0002	0.0032*	-0.0128	0.4598
f/(solvent) ²	-0.0015	0.0001*	0.0112	0.0011*	0.0003	0.0020*	-0.0170	0.4172
g/(Cycles) ²	0,0231	0.0340*	-0.0669	0.5097	-0.0003	0.9234	0.2252	0.8256
h(TxSolvent)	-0.0011	0.0011*	-0.0023	0.3386	-0.0001	0.2458	0.0504	0.0753
i(Txcycles)	-0.0443	0.0048*	0.0793	0.5147	0.0026	0.5766	-0.2159	0.8602
J(solventxcycles)	-0.0558	0.9161	0.3	0.9600	0.3162	0.2086	-33.2425	0.5919
R2	99.5506		96.7759		93.3575		77.1859	
R2 adjusted	98.8764		91.9398		83.3936		42.9647	
Pure error**	0.5198		5.5833		0.1956		54.9278	

*Statistically significant values: $p < 0.05$

** Mean Square