Supplemental Material

Tables

Table A1: Estimated coefficient values obtained from the second-order polynomial model, parametric intervals and numerical statistical criteria for each parametric response criteria of the extractions systems tested (HAE and UAE). Response criteria comprise the following: 1) % extraction yield; 2) Tr content in the format values Y_1 and Y_2; and 3) Ph content in the format values Y_1 and Y_2.

PARAMETERS		RESIDUE	TRITERPENE CONTENT		PHENOLIC CONTENT	
		Yield	Y_1	Y_2	Y_1	Y_2
HEAT ASSISTED EXTRACTION (HAE)						
Intercept	b_0	5.37±1.0	11.62±0.7	220.09±25.2	5.33±0.3	108.07±10.5
Linear effect	b_1	ns	2.15±0.7	-14.12±12.6	0.16±0.0	ns
	b_2	-0.46±0.3	0.51±0.7	38.37±18.7	0.01±0.0	10.44±7.7
	b_3	3.24±0.7	3.67±0.7	ns	1.21±0.0	-7.99±7.7
Quadratic effect	b_{11}	1.01±0.7	-0.28±0.1	-23.41±18.7	ns	-12.63±7.9
	b_{22}	ns	ns	ns	0.05±0.0	ns
	b_{33}	0.96±0.7	-1.73±0.7	-37.41±18.7	-1.07±0.0	-20.01±7.9
Interactive effect	b_{12}	0.35±0.3	ns	-39.42±18.7	ns	ns
	b_{13}	ns	-0.11±0.3	20.62±18.7	ns	ns
	b_{23}	-1.38±0.9	1.27±0.3	ns	ns	ns
Statistics (R^2)		0.8948	0.8978	0.9136	0.9104	0.9210
ULTRASOUND ASSISTED EXTRACTION (UAE)						
Intercept	b_0	6.64±0.3	11.26±0.7	178.99±17.7	6.45±0.3	96.70±1.8
Linear effect	b_1	-0.35±0.3	ns	ns	ns	1.95±1.8
	b_2	ns	-0.62±0.5	ns	ns	3.67±1.8
	b_3	0.73±0.3	4.41±0.5	89.57±16.0	1.22±0.2	18.44±1.8
Quadratic effect	b_{11}	ns	ns	ns	-0.23±0.2	ns
	b_{22}	ns	0.55±0.5	ns	ns	ns
	b_{33}	-1.36±0.3	-0.54±0.5	30.50±16.3	-1.17±0.2	-2.53±1.8
Interactive effect	b_{12}	ns	ns	-19.32±9.9	0.21±0.2	4.55±1.8
	b_{13}	-0.27±0.3	-0.58±0.3	ns	-0.23±0.2	ns
	b_{23}	-0.41±0.3	ns	ns	-0.19±0.2	-2.55±1.8
Statistics (R^2)		0.9222	0.9349	0.9330	0.9223	0.9013

Figures

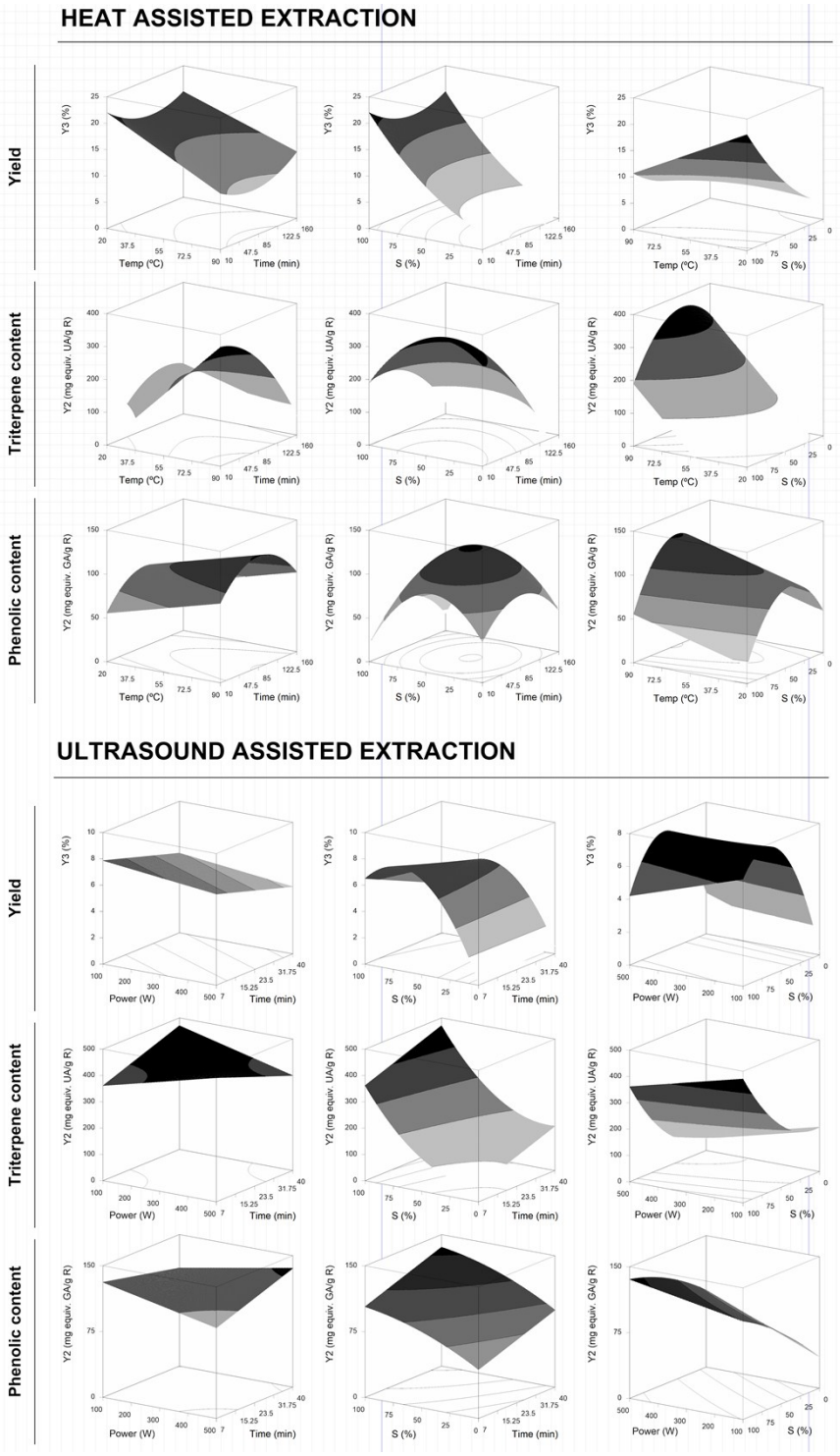

Figure A1: Shows the joint graphical 3D analysis as a function of each variables involved for HAE and UAE systems for the extraction yield and the response content of Tr and Ph in the format value of Y_2 (mg/g R). Each of the net surfaces represents the theoretical three-dimensional response surface predicted with the second order polynomial Eq. (1) as a function of each one of the involved variables and described by Eqs. (4), (5) and (6) for HAE and Eqs. (9), (10) and (11) for UAE. The statistical design and results are described in **Table 1**. Estimated parametric values are shown in **Table A1**. The binary actions between variables are presented when the excluded variable is positioned at the centre of the experimental domain (**Table 1**).

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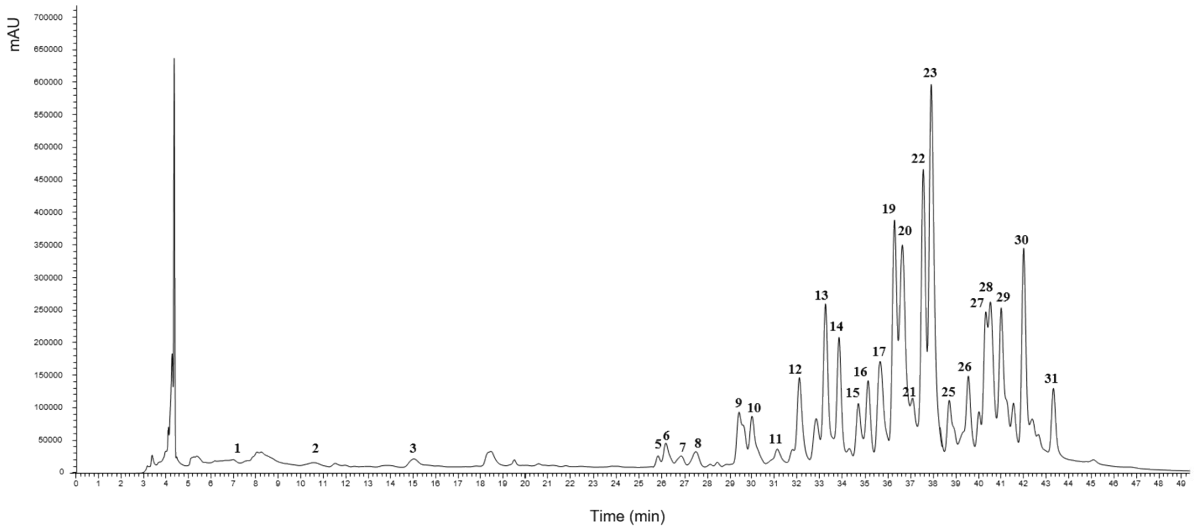

Figure A2: Example of the HPLC profiles derived from from *G. lucidum* regarding the content of phenolic and triterpenoid compounds. A representative case at the optimal global conditions of UAE presented in **Table 3**). Compounds identification numbers are described in detail in **Table 4**.

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