

# Response Surface Modelling of Six Organic Acids from *Pinellia ternata* (Thunb.) Breit by Ultrasound-Assisted Extraction and Its Determination by High-Performance Liquid Chromatography Coupled to Triple Quadrupole Mass Spectrometry

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**Table S1.** Detailed information of different *Pinellia ternata* samples.

Sample	Production Regions
1	Huangshan City, Anhui Province
2	Chongqing City
3	Xinyang City, Henan Province
4	Baoding City, Hebei Province
5	Qianjiang City, Hubei Province (Red skin variety)
6	Qianjiang City, Hubei Province (Yellow skin variety)
7	Tianmen City, Hubei Province
8	Yichang City, Hubei Province
9	Shiyan City, Hubei Province
10	Huaihua City, Hunan Province
11	Yingtian City, Jiangxi Province
12	Shangluo City, Shanxi Province
13	Wenshan Prefecture, Yunnan Province

**Table S2.** The ANOVA test for the fitted quadratic polynomial model of predictive model.

Source	Sum of Squares	Degree of Freedom	Mean Square	F-Value	p Value
Model	218.43	9	24.27	14.3	<0.01
Residuals	11.88	7	1.70		
Lack of fit	8.24	3	2.75	3.03	0.1564
Pure error	3.63	4	0.91		
Total	230.31	16			
CV (%)					8.77
R <sup>2</sup>					0.9484
Radj <sup>2</sup>					0.8821

**Table S3.** The total organic acid content extracted under the 17 schemes conditions in RSM design and the optimized conditions.

Extraction Conditions	Organic acid Content (mg/g)
1	19.41±0.15
2	18.60±0.17
3	11.60±0.02
4	17.10±0.05
5	16.12±0.05
6	15.10±0.15
7	15.71±0.52
8	18.65±0.19
9	10.76±0.15
10	9.76±0.05
11	12.95±0.07
12	13.63±0.07
13	10.33±0.04
14	19.68±0.27
15	9.42±0.04
16	20.94±0.23
17	12.63±0.09
18	21.11±0.54

(Notes: 1–17 is the operation method of RSM design, and 18 is the method after RSM optimization.)