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Supplementary materials

Extraction of Galphimines from *Galphimia glauca* with Supercritical Carbon Dioxide

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Table S1. Modelling results for supercritical fluid extraction of *Galphimia glauca* at T = 323.15 K, d_p = 326 μm and Q_V = 3 L·min^{-1}.

P (MPa)	$y_r \cdot 10^3$ ($g_{extract} \cdot g_{CO2}^{-1}$)	Sovová [24]					Papamichail et al. [26]				
		$k_f a \cdot 10^2$ (min^{-1})	$k_s a \cdot 10^3$ (min^{-1})	G (–)	t_k (min)	$AARD$ (%)	$k_f a \cdot 10^2$ (min^{-1})	K (–)	$1 - \bar{x}/x_0$ (–)	$\bar{t}$ (min)	$AARD$ (%)
15.00	0.753	23.001	6.807	0.52	39.33	1.55	27.208	0.12	0.53	27.19	1.44
21.25	1.889	58.751	4.053	0.52	28.40	2.11	72.928	0.07	0.53	23.86	2.45
27.50	2.282	2.498	8.190	0.52	83.71	0.67	0.851	0.34	0.53	69.32	1.21
33.75	3.754	1.324	8.574	0.52	95.06	1.93	0.415	0.61	0.53	85.32	2.12

Table S2. Modelling results for supercritical fluid extraction of *Galphimia glauca* at P = 27.50 MPa, d_p = 326 μm and Q_V = 3 L·min^{-1}.

T (K)	$y_r \cdot 10^3$ ($g_{extract} \cdot g_{CO2}^{-1}$)	Sovová [24]					Papamichail et al. [26]				
		$k_f a \cdot 10^2$ (min^{-1})	$k_s a \cdot 10^3$ (min^{-1})	G (–)	t_k (min)	$AARD$ (%)	$k_f a \cdot 10^2$ (min^{-1})	K (–)	$1 - \bar{x}/x_0$ (–)	$\bar{t}$ (min)	$AARD$ (%)
313.15	0.556	11.691	9.898	0.52	95.40	2.27	7.958	0.15	0.53	57.81	1.52
318.15	1.242	2.852	6.551	0.52	57.65	3.55	0.987	0.28	0.53	48.02	3.26
323.15	2.282	2.498	8.190	0.52	83.71	0.67	0.851	0.34	0.53	69.32	1.21
328.15	5.699	23.801	5.592	0.52	12.75	1.97	25.242	0.09	0.53	10.41	2.67

Table S3. Modelling results for supercritical fluid extraction of *Galphimia glauca* at P = 27.50 MPa, T = 323.15 K and Q_V = 3 L·min^{-1}.

d_p (μm)	$y_r \cdot 10^3$ ($g_{extract} \cdot g_{CO2}^{-1}$)	Sovová [24]					Papamichail et al. [26]				
		$k_f a \cdot 10^2$ (min^{-1})	$k_s a \cdot 10^3$ (min^{-1})	G (–)	t_k (min)	$AARD$ (%)	$k_f a \cdot 10^2$ (min^{-1})	K (–)	$1 - \bar{x}/x_0$ (–)	$\bar{t}$ (min)	$AARD$ (%)
224	2.282	4.944	4.305	0.89	105.02	2.13	1.831	0.10	0.88	85.51	2.11
326	2.282	2.498	8.190	0.52	83.71	0.67	0.851	0.34	0.53	69.32	1.21
461	2.282	1.352	7.869	0.41	56.71	2.90	0.307	0.47	0.25	54.09	3.67
548	2.282	1.599	6.075	0.86	59.02	1.85	0.334	0.48	0.87	51.83	1.83

Table S4. Modelling results for supercritical fluid extraction of *Galphimia glauca* at P = 27.50 MPa, T = 323.15 K and d_p = 326 μm.

Q_V (MPa)	$y_r \cdot 10^3$ ($g_{extract} \cdot g_{CO2}^{-1}$)	Sovová [24]					Papamichail et al. [26]				
		$k_f a \cdot 10^2$	$k_s a \cdot 10^3$	G	t_k	$AARD$	$k_f a \cdot 10^2$	K	1 –	$\bar{t}$	$AARD$

		(min^{-1})	**(min^{-1})**	**(–)**	**(min)**	**(%)**	**(min^{-1})**	**(–)**	$\bar{x}/x_0$ **(–)**	**(min)**	**(%)**
1	2.282	54.753	6.083	0.52	39.30	2.77	58.153	0.31	0.53	30.97	4.12
2	2.282	14.599	6.908	0.52	35.44	3.02	15.004	0.18	0.53	25.62	3.84
3	2.282	2.498	8.190	0.52	83.71	0.67	0.851	0.34	0.53	69.32	1.21
4	2.282	6.463	6.223	0.52	30.73	3.25	2.652	0.14	0.53	24.41	3.55