

Article

Influence of Torrefaction Temperature and Climatic Chamber Operation Time on Hydrophobic Properties of Agri-Food Biomass Investigated Using the EMC Method

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Supplementary Materials

Table S1. Proximate analysis of the investigated raw and torrefied food waste biomass.

Type of waste biomass	Temperature	Moisture content		Ash content		Volatile matter content		Fixed Carbon content		Higher Heating Value	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
°C											
Mandarin peels	105	4.57	0.25	3.52	0.06	82.16	0.61	9.75	0.80	16.96	0.27
	200	1.80	0.33	3.91	0.11	75.08	0.54	19.21	0.62	19.30	0.14
	220	2.21	0.23	4.26	0.10	72.64	0.52	20.88	0.81	19.69	0.13
	240	2.74	0.09	6.22	0.44	50.10	0.66	40.94	0.93	23.31	0.10
	260	2.10	0.38	6.10	0.17	52.61	0.08	39.19	0.60	23.09	0.02
	280	2.92	0.10	6.87	0.27	53.16	1.48	37.04	1.14	24.65	0.09
	300	2.43	0.07	8.35	0.30	39.56	1.87	49.66	1.84	26.66	0.05
	320	2.68	0.17	8.61	0.31	37.19	2.20	51.52	2.60	26.69	0.13
Lemon peels	105	4.22	0.02	4.94	0.09	80.77	0.42	10.08	0.37	16.82	0.05
	200	2.54	0.32	5.33	0.04	78.86	2.33	13.27	2.03	17.35	0.11
	220	2.22	0.18	5.98	0.02	71.72	0.21	20.08	1.42	18.37	0.11
	240	3.16	0.10	6.22	0.21	61.95	4.95	28.67	2.02	18.57	0.23
	260	3.82	0.10	7.75	0.10	57.98	0.32	30.46	1.55	21.30	0.17
	280	4.32	0.14	9.38	0.35	48.46	0.11	37.84	0.72	22.18	0.33
	300	4.90	0.04	9.72	0.21	44.95	0.28	40.44	0.99	23.53	0.14
	320	3.65	0.09	12.34	0.41	32.93	0.77	51.08	2.19	26.07	0.30
Grapefruit peels	105	5.80	0.27	4.08	0.05	84.46	0.33	5.66	0.57	15.74	0.15
	200	2.82	0.02	4.77	0.09	77.75	0.46	14.66	0.55	19.38	1.01
	220	3.14	0.12	5.60	0.17	68.80	0.73	22.45	0.71	20.65	0.14
	240	2.69	0.14	6.74	0.19	66.23	0.04	24.34	0.28	21.52	0.17
	260	3.56	0.16	9.73	0.06	47.52	0.61	39.19	0.73	24.15	0.26
	280	3.12	0.02	9.67	0.32	48.49	0.21	38.72	0.23	24.26	0.20
	300	3.54	0.27	10.08	0.65	47.55	0.79	38.83	0.78	24.36	0.17
	320	3.61	0.13	10.51	0.18	44.21	0.29	41.67	0.13	25.11	0.02

Butternut squash	105	3.07	0.17	8.74	0.21	78.22	1.93	9.97	1.58	16.72	0.28
	200	0.67	0.08	9.30	0.08	71.88	0.11	18.36	0.40	16.97	0.25
	220	2.35	0.01	9.84	0.16	70.49	0.27	18.10	1.42	18.56	0.09
	240	2.94	0.07	13.95	0.10	54.41	1.10	29.67	2.02	19.95	0.05
	260	2.08	0.49	16.60	0.40	43.88	0.86	38.14	1.55	23.93	0.13
	280	2.61	0.23	17.94	0.29	41.18	0.42	38.27	0.72	24.38	0.06
	300	2.78	0.06	18.64	0.55	37.87	0.29	41.63	0.99	25.07	0.11
	320	2.39	0.06	19.65	0.11	36.09	1.45	42.67	2.19	25.08	0.12