

## Supplementary Materials

**Table S1.** OLS estimation for different rice varieties.

Variables	MA	MB	Tricin	Caffeic acid	$\rho$ -Hydroxybenzoic acid	$\rho$ -Coumaric acid	Ferulic acid	Salicylic acid	Cinnamic acid
Milky Queen Var.	-16.09	-2.901	-218.4**	-79.37	-78.38*	-53.59**	-72.15	-246.3	-22.35
	-9.732	-8.534	-88.5	-54.18	-42.3	-25.95	-50.19	-153.9	-22.92
Koshihikari Var.	26.65***	19.94***	381.2***	252.3***	149.5***	116.0***	161.2***	503.2***	59.13***
	-6.882	-6.035	-62.58	-38.31	-29.91	-18.35	-35.49	-108.8	-16.21
Observations	48	48	48	48	48	48	48	48	48
R-squared	0.056	0.003	0.117	0.045	0.069	0.085	0.043	0.053	0.02

\* , \*\* , and \*\*\* indicate significance at  $p < 0.05$ , 0.01, and 0.001, respectively; MA: momilactone A; MB: momilactone B.

**Table S2.** OLS estimation for non-germinated and germinated samples.

Variables	MA	MB	Tricin	Caffeic acid	$\rho$ -Hydroxybenzoic acid	$\rho$ -Coumaric acid	Ferulic acid	Salicylic acid	Cinnamic acid
Germinated	29.86***	31.17***	296.4***	187.3***	128.8***	109.0***	171.8***	395.9***	72.46***
	-8.997	-7.204	-83.42	-48.06	-39.53	-21.85	-44.62	-146.9	-20.55
Non-germinated	3.672	2.909	123.8**	119.0***	45.96	34.74**	39.24	182.1*	11.72
	-6.362	-5.094	-58.99	-33.98	-27.95	-15.45	-31.55	-103.9	-14.53
Observations	48	48	48	48	48	48	48	48	48
R-squared	0.193	0.289	0.215	0.248	0.188	0.351	0.244	0.136	0.213

\* , \*\*, and \*\*\* indicate significance at  $p < 0.05$ ,  $0.01$ , and  $0.001$ , respectively; MA: momilactone A; MB: momilactone B.

**Table S3.** OLS estimation for non-cooked and cooked samples.

Variables	MA	MB	Tricin	Caffeic acid	$\rho$ -Hydroxybenzoic acid	$\rho$ -Coumaric acid	Ferulic acid	Salicylic acid	Cinnamic acid
Cooked	3.49	-1.97	142.5	78.96	34.65	7.674	43.46	174.5	48.24**
	-10	-8.54	-91.8	-54.19	-43.55	-27.11	-50.91	-156	-22.04
Non-cooked	16.86**	19.48***	200.8***	173.1***	93.03***	85.42***	103.4***	292.8**	23.83
	-7.074	-6.039	-64.92	-38.32	-30.8	-19.17	-36	-110.3	-15.58
Observations	48	48	48	48	48	48	48	48	48
R-squared	0.003	0.001	0.05	0.044	0.014	0.002	0.016	0.026	0.094

\* \*\* and \*\*\* indicate significance at  $p < 0.05$ , 0.01, and 0.001, respectively; MA: momilactone A; MB: momilactone B.

**Table S4.** OLS estimation for 80% ethanol and 80% methanol samples.

R-squared	0.062	0.054	0.057	0.118	0.069	0.081	0.153	0.218	0.052
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\*, \*\*, and \*\*\* indicate significance at p < 0.05, 0.01, and 0.001, respectively; MA: momilactone A; MB: momilactone B.

**Table S5.** OLS estimation for sonicated samples.

Variables	MA	MB	Tricin	Caffeic acid	$\rho$ -Hydroxybenzoic acid	$\rho$ -Coumaric acid	Ferulic acid	Salicylic acid	Cinnamic acid
Sonication (RT)	-4.263	-7.096	15.65	-30.6	-26.86	2.616	35.45	15.96	3.71
	-12.84	-11.09	-113	-73.77	-51.94	-34.39	-64.56	-182.2	-27.92
Heat (80°C)	21.05**	21.76***	242.0***	241.4***	111.1***	89.71***	99.97**	299.4**	42.38**
	-9.076	-7.844	-79.88	-52.16	-36.73	-24.32	-45.65	-128.8	-19.74
Observations	32	32	32	32	32	32	32	32	32
R-squared	0.004	0.013	0.001	0.006	0.009	0	0.01	0	0.001
Sonication (80°C)	-3.076	-2.708	74.25	-55.67	24.48	-3.991	40.11	226	13
	-12.07	-10.49	-97.56	-55.79	-52.98	-30.24	-51.28	-181.2	-26.45
Heat (80°C)	21.05**	21.76***	242.0***	241.4***	111.1***	89.71***	99.97***	299.4**	42.38**
	-8.538	-7.42	-68.99	-39.45	-37.47	-21.39	-36.26	-128.1	-18.7
Observations	32	32	32	32	32	32	32	32	32
R-squared	0.002	0.002	0.019	0.032	0.007	0.001	0.02	0.049	0.008
Sonication (80°C)	1.187	4.388	58.6	-25.06	51.34	-6.606	4.658	210.1	9.295
	-12.24	-9.966	-134.6	-73.28	-56.25	-35.85	-72	-211.5	-31.24
Sonication (RT)	16.79*	14.67**	257.7**	210.8***	84.29**	92.33***	135.4**	315.3**	46.09**
	-8.652	-7.047	-95.16	-51.81	-39.77	-25.35	-50.91	-149.5	-22.09
Observations	32	32	32	32	32	32	32	32	32
R-squared	0	0.006	0.006	0.004	0.027	0.001	0	0.032	0.003

\*, \*\*, and \*\*\* indicate significance at p < 0.05, 0.01, and 0.001, respectively; MA: momilactone A; MB: momilactone B.