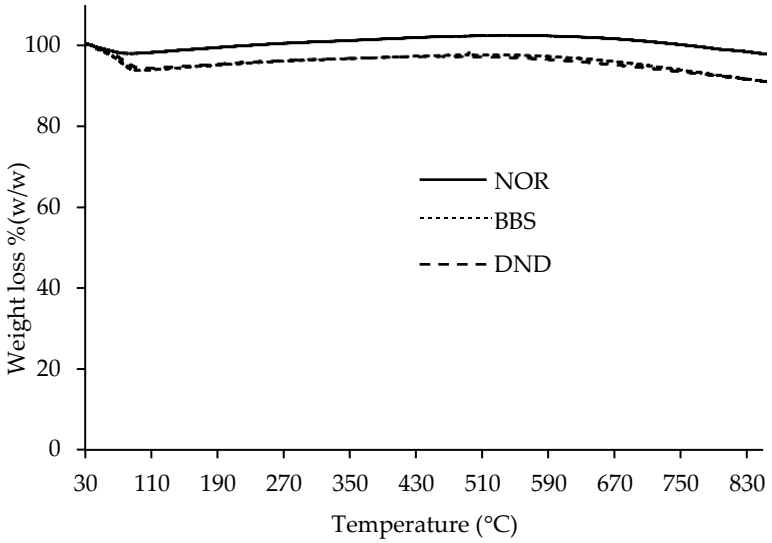

Figure S1. TGA curves of the carbons (BBS: babassu-derived carbon; DND: dende-derived carbon; NOR: commercial activated carbon).

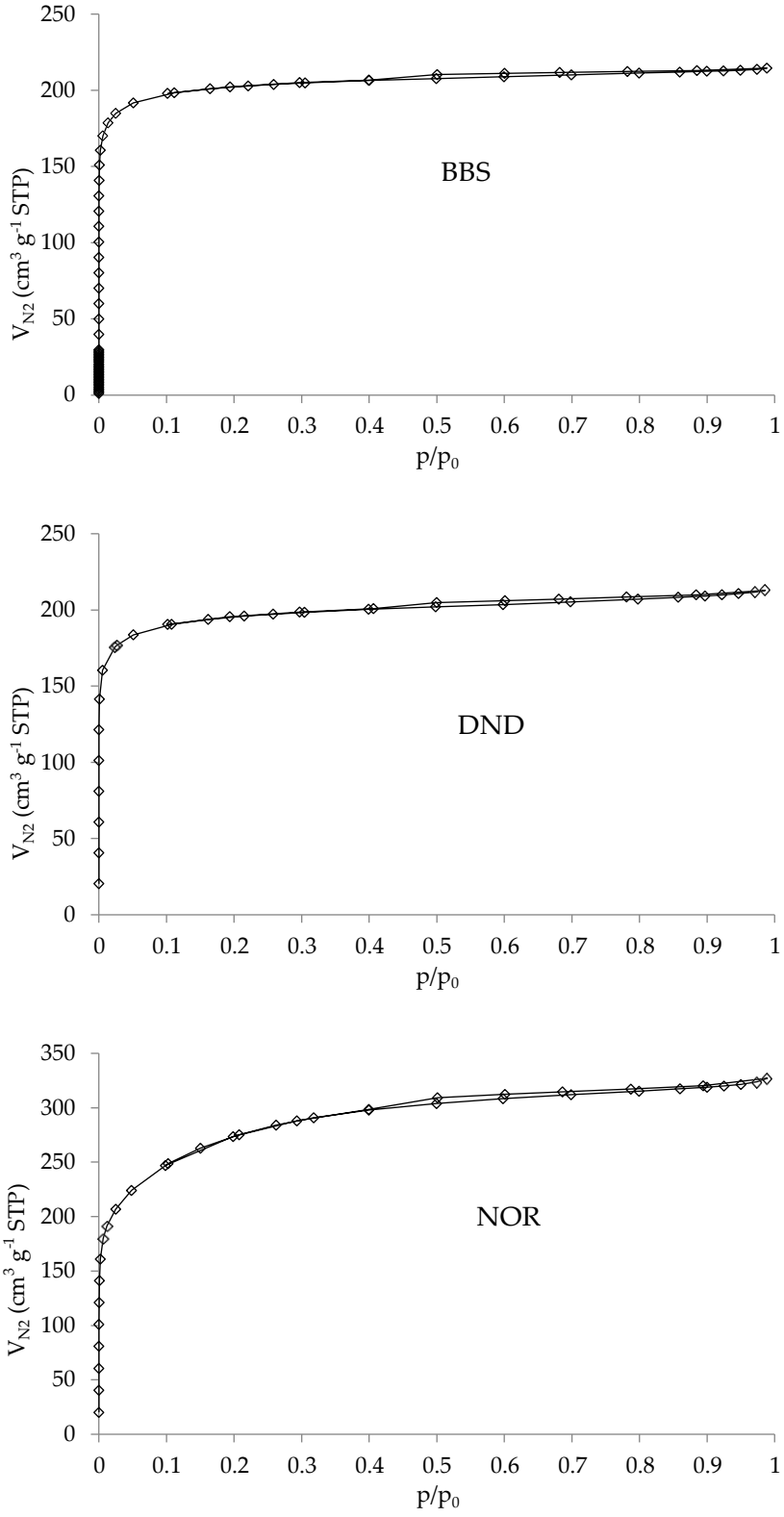

Figure S2. N_2 adsorption–desorption isotherms at 77 K of the carbons (BBS: babassu-derived carbon; DND: dende-derived carbon; NOR: commercial activated carbon).

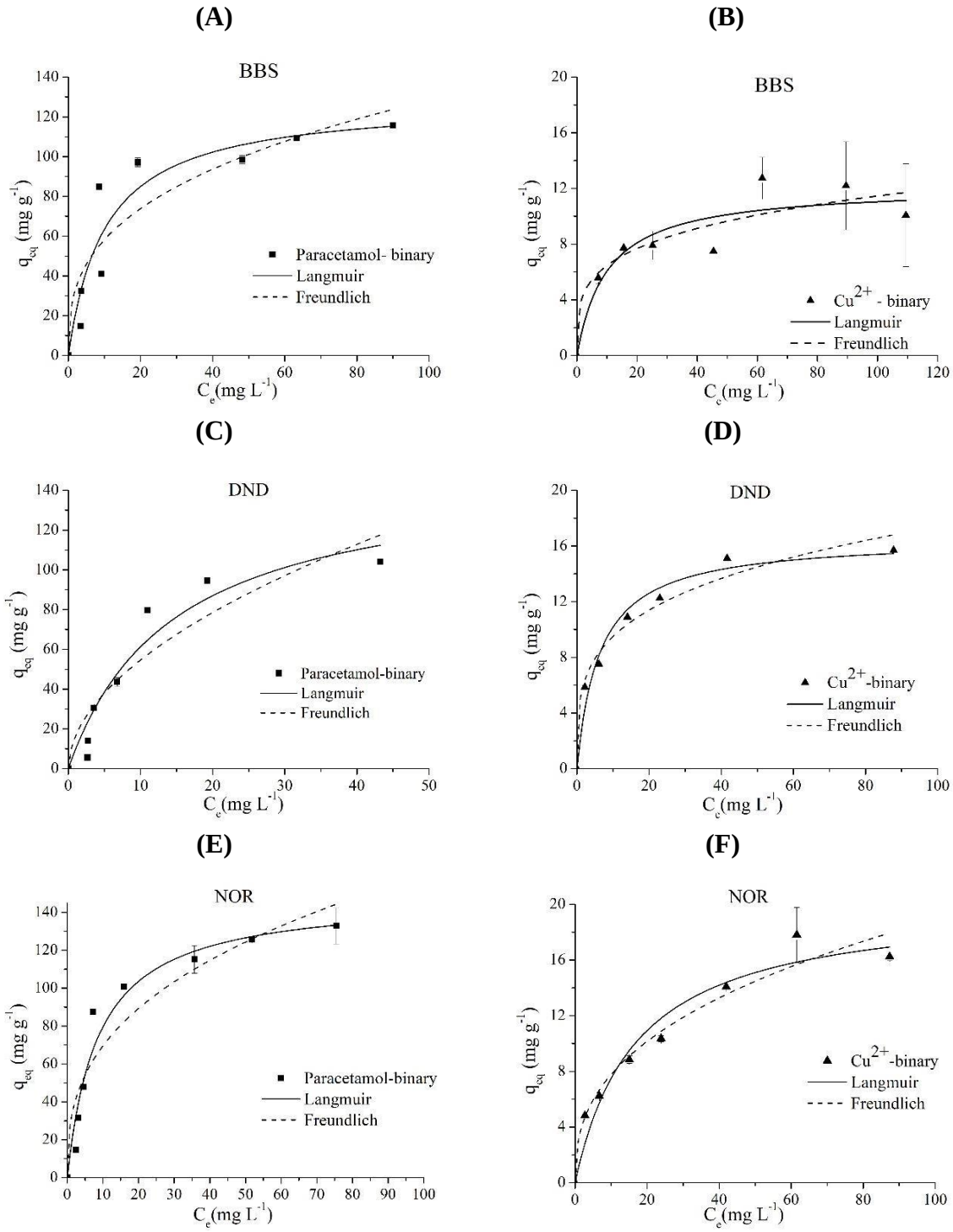

Figure S3. Experimental data and fitting to the Langmuir and Freundlich isotherm models for paracetamol and Cu^{2+} adsorption in binary systems (A, C, and E: paracetamol adsorption in a binary system with BBS, DND, and NOR, respectively; B, D, and F: Cu^{2+} adsorption in a binary system with BBS, DND, and NOR, respectively; BBS: babassu; DND: dende; NOR: Norit).

Table S1. Kinetic parameters from PSO kinetic model for single and binary adsorption experiments.

Adsorbent	Experimental/ PSO model	Parameters	Adsorption			
			Single		Binary	
			Paracetamol	Cu^{2+}	Paracetamol	Cu^{2+}
BBS	Exp.	q_e (exp) (mg g^{-1})	90.4	6.90	89.9	6.70
	PSO	q_e (mg g^{-1})	87.6	3.80	86.4	6.40
		k_2 (g mg^{-1} h^{-1})	4.8×10^{-4}	0.400	0.010	8.9×10^{-4}
		R^2	0.990	0.460	0.980	0.980
		χ^2	9.76	2.26	26.6	0.10
		AIC	32.3	20.5	37.0	n.c.
		Removal (%)	89.0	6.00	86.0	6.00
DND	Exp.	q_e (exp) (mg g^{-1})	94.2	4.60	88.6	4.80
	PSO	q_e (mg g^{-1})	89.4	3.30	86.0	4.20
		k_2 (g mg^{-1} h^{-1})	5.6×10^{-4}	0.300	3.6×10^{-4}	0.300
		R^2	0.970	0.400	0.980	0.930
		χ^2	28.8	1.64	14.2	0.16
		AIC	44.2	15.1	36.4	-0.79
		Removal (%)	88.0	4.00	85.0	4.00
NOR	Exp.	q_e (exp) (mg g^{-1})	95.2	5.20	94.4	5.40
	PSO	q_e (mg g^{-1})	94.8	3.80	94.5	3.80
		k_2 (g mg^{-1} h^{-1})	1.8×10^{-3}	0.300	0.001	0.200
		R^2	0.990	0.750	0.990	0.390
		χ^2	4.64	0.64	6.72	1.88
		AIC	24.1	8.54	26.8	14.1
		Removal (%)	95.0	4.00	91.0	5.00

PSO: pseudo-second-order kinetic model; n.c.: not calculated