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Supplementary Materials: Study on the Removal Efficiency and Mechanism of Tetracycline in Water Using Biochar and Magnetic Biochar

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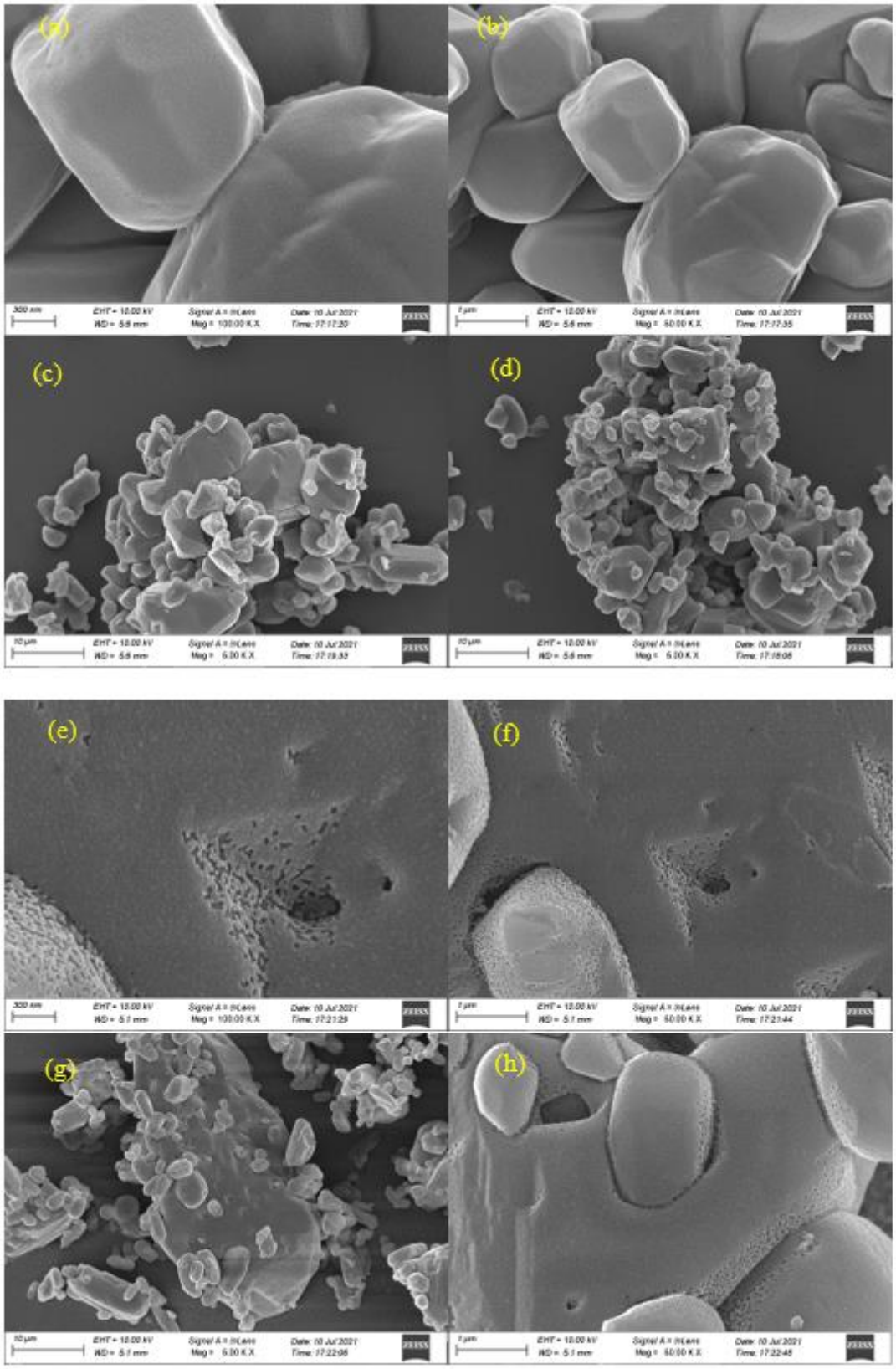

Figure S1. Tebuconazole and linuron particle morphologies. (**a**) Tebuconazole with magnitude of 100.00 K.X; (**b**) Tebuconazole with magnitude of 50.00 K.X; (**c**) Tebuconazole with XRD magnitude of 5.00 K.X; (**d**) Tebuconazole with XRD magnitude of 50.00 K.X; (**e**) linuron with magnitude of 100.00 K.X; (**f**) linuron with magnitude of 50.00 K.X ; (**g**) linuron with XRD magnitude of 5.00 K.X; (**h**) linuron with XRD magnitude of 50.00 K.X.

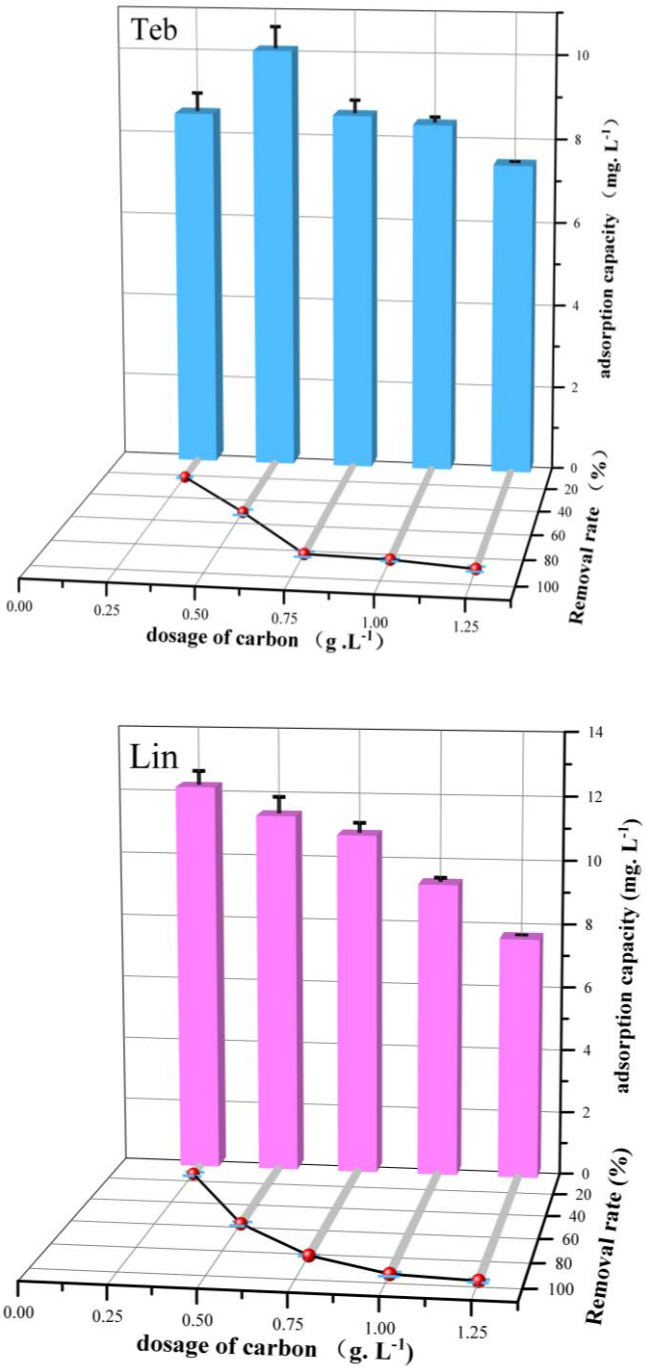

Figure S2. The adsorption effect of biochar prepared under different conditions on tebuconazole and linuron.

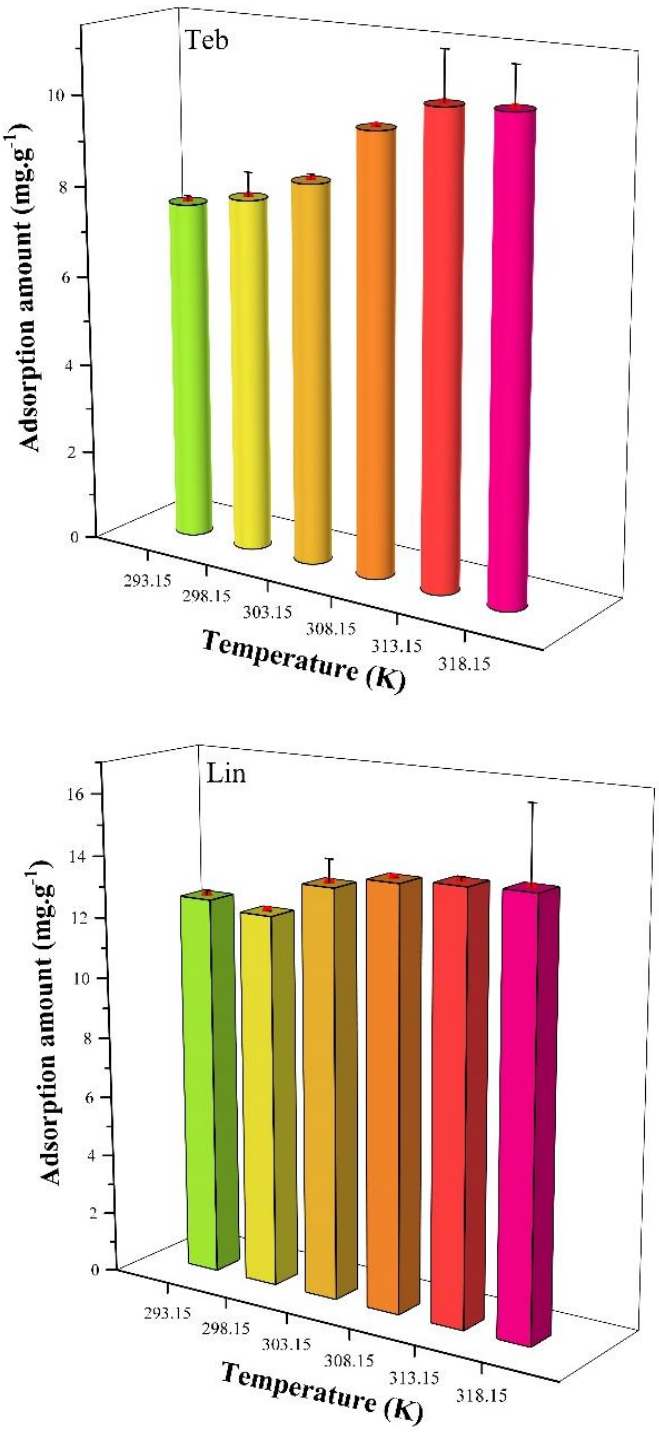

Figure S3. Effect of temperature on adsorption of tebuconazole and linuron on BCF600.

Table S1. Correlational analysis of BCF600 adsorption capacity and concentration of metal salt ions.

		Cu^{2+}	Cr^{6+}	Mg^{2+}	Ca^{2+}	K^{+}	Pb^{2+}
Tebuconazole	Pearson correlation (r)	−0.571	−0.793	−0.216	0.078	−0.028	0.700
	Significance two sided (P)	0.053	0.002	0.501	0.809	0.930	0.011
	N	16	16	16	16	16	16
Linuron	Pearson correlation (r)	−0.011	−0.943	0.076	0.586	0.354	−0.307
	Significance two sided (P)	0.973	0.000	0.813	0.045	0.259	0.332
	N	16	16	16	16	16	16

Table S2. Correlational analysis of BCF600 adsorption capacity and concentration of humic acid and soluble starch.

		Humic acid	soluble starch
Tebuconazole	Pearson correlation (r)	−0.798	−0.344
	Significance two sided (P)	0.002	0.274
	N	16	16
Linuron	Pearson correlation (r)	−0.947	−0.627
	Significance two sided (P)	0.000	0.274
	N	16	0.029

Table S3. Water quality parameters at different sampling locations.

Location	Turbidity	pH	TOC	TC	IC	uv254	NH_4^+-N
Guangdang river	11.34	7.35	11.14	33.89	22.75	0.179	7.79
Fenghuangshan reservoir	10.22	8.27	10.86	38.87	28.01	0.146	8.87
Miaohou reservoir	5.43	8.18	13.49	53.84	40.36	0.189	15.36
Tap water	0.14	7.94	1.236	34.47	34.47	0.02	0.09
Deionized water	0.06	6.85	0.3174	0.4504	0.133	0.01	0

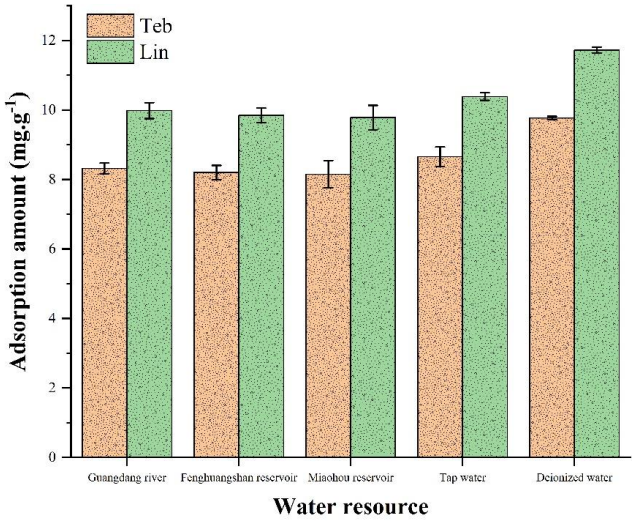

Figure S4. Tebuconazole and linuron removal efficacy in real water bodies on BCF600.

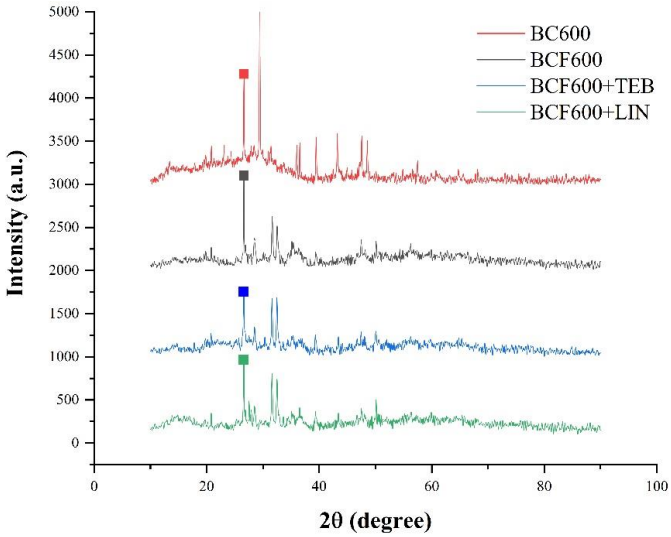

Figure S5. XRD analysis of BC600, BCF600 and BCF600 after uptake tebuconazole and linuron.