

Predictive Machine Learning Model to Assess the Adsorption Efficiency of Biochar-Heavy Metals for Effective Remediation of Soil–Plant Environment

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Table S1. Summary information for quantitative covariates.

Variable	Min	Mean	Max	The first quartile (Q1)	Median	The third quartile (Q3)
Application rate of biochar (%)	0.22	3.14	10	1	3	5
Pyrolysis temperature (°C)	300	500	750	450	500	550
Biochar pH	8.2	10.1	10.53	9.4	10.0	10.4
Soil pH	4.71	6.28	8.06	5.7	6.01	6.8
SOC (g/kg)	0.045	16.54	190	6.3	12.27	15
Available Cd (mg/kg)	0.01	2.88	45	-	-	-
Available Pb (mg/kg)	0.024	4.81	15.45	-	-	-
Available Cu (mg/kg)	0.042	10.00	37.95	-	-	-
Available Zn (mg/kg)	0.15	84.41	295.63	-	-	-
Total Cd (mg/kg)	0.030	24.05	393.20	-	-	-
Total Pb (mg/kg)	4.50	996.26	4626	-	-	-
Total Cu (mg/kg)	3.20	347.83	693	-	-	-
Total Zn (mg/kg)	47.29	684.90	2226	-	-	-

Table S2. Parts of tissues number.

Parts of tissues	Sample Number
shoot	99
root	112

Table S3. Crop sample number for different plant.

Crops	Sample Number
Rice	8
Wheat	23
Corn	40
Vegetable	140

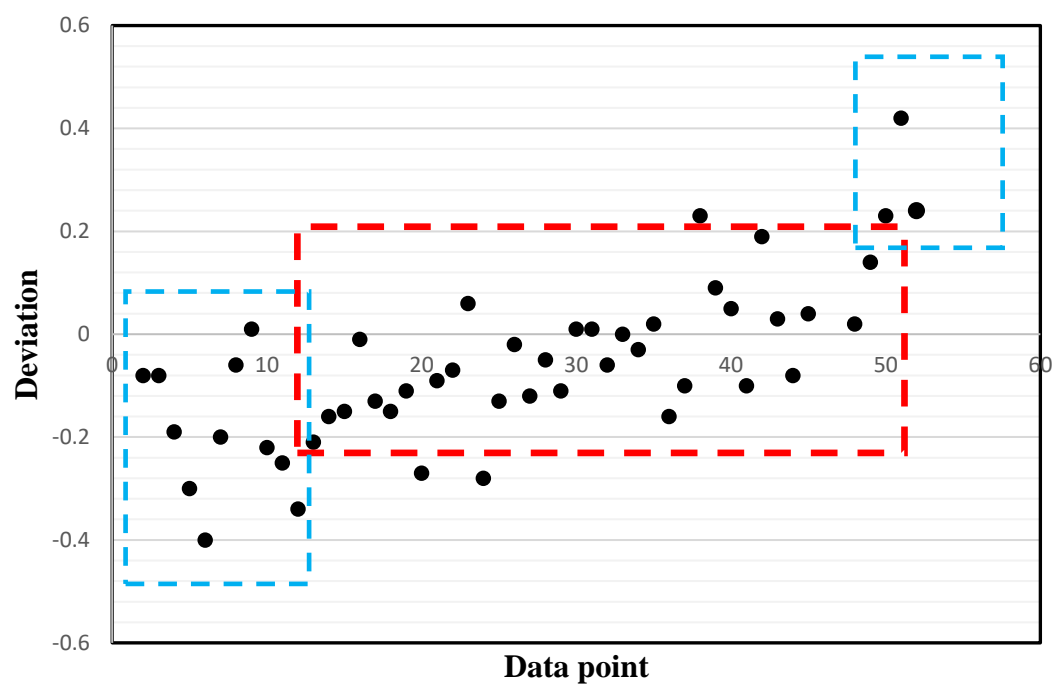


Figure S1. Deviation of the predicted and experimental change of crop uptake (CCU). Data points are sorted in ascending order by values at the x-axis.