Supplementary Information

Table S1. Variation of agronomic characteristics and Cd removal in sorghums.

Sorghums	Items	Min.	Max.	Mean	Percentile			Skewness		Kurtosis		CV%
					25%	50%	75%	Statistic	Std. Error	Statistic	Std. Error	
BS	DW	12.43	32.67	21.14	18.17	21.30	23.53	0.317	0.434	0.214	0.845	22.8
	C_{cd}	0.23	3.95	1.86	1.17	1.64	2.40	0.788	0.434	0.071	0.845	53.4
	R_{cd}	4.67	93.09	39.75	22.02	31.81	57.65	0.836	0.434	-0.227	0.845	60.2
SS	DW	6.64	23.63	14.23	9.29	15.04	17.76	0.089	0.491	-0.870	0.953	35.6
	C_{cd}	0.85	4.42	2.43	1.73	2.61	2.91	0.487	0.491	0.132	0.953	39.1
	R_{cd}	11.26	62.78	33.41	20.82	29.90	45.24	0.585	0.491	-0.856	0.953	48.9

Note: DW, dry matter weight, 10^3kg ha^{-1}. Ccd, Cd concentration in shoot, mg kg^{-1}, Rcd, removal of Cd, g ha^{-1}. BS, biomass sorghum. SS, sweet sorghum. CV, coefficient of variation.

Table S2. The variety codes of sorghums.

Sorghums	Codes of variety
Biomass sorghum	13300, 14135, 14141, 14263, 14269, 14574, 14578, 14582, 14587, 15080, 15118, 15124, 15157, 15346, 15414, 15595, 16058, 16199, 16212, 16575, 16646, 16680, 17066, 18005, N5L60, N5D61, N52K2562, N52K1009, N51M4264
Sweet sorghum	13246, 13253, 13221, N3J53-1018, 14509, 15008, N31L5010, 200513253, 13431, 16043, N31K2168, M35008, N32F2026, 15092, N42A2140, 202815092, N31G2174, N31H2358, 16023, S20413253, 13258, N3J53-1028

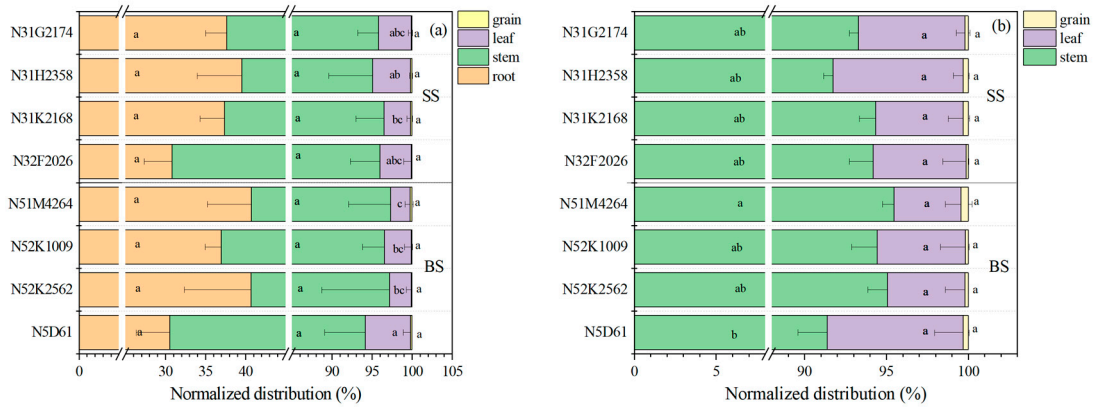


Figure S1. Distribution of removal Cd in the different organs of whole sorghum (a) and shoot (b). Different letters indicate significant differences between each variety, LSD test, $P < 0.05$ ($n = 24$).

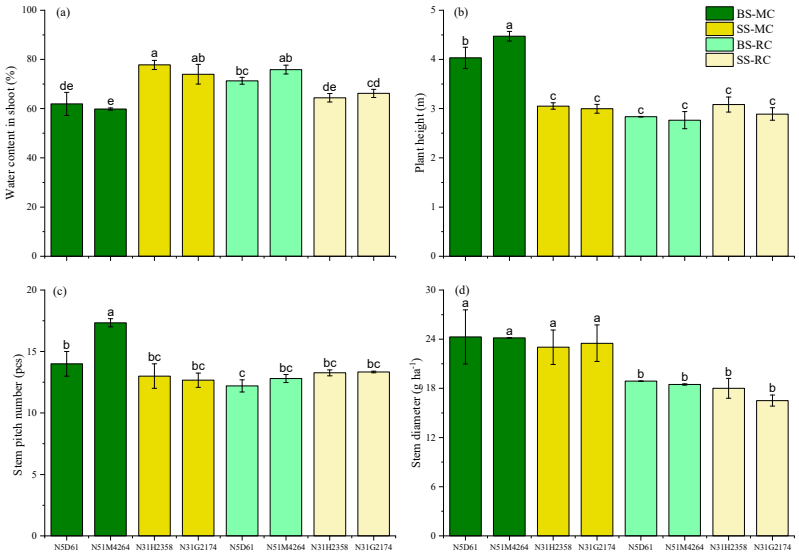


Figure S2. Water content in shoot (WC, a), Plant height (PH, b), Stem pitch number (SPN, c), Stem diameter (SD, d) of the main corps (MC) and ratoon crops (RC) of sorghums. Different letters indicate significant differences between each variety, LSD test, $P < 0.05$ ($n = 24$).