

Supplementary Materials:

Profiling of Water-Use Efficiency in Switchgrass (*Panicum virgatum* L.) and the Relationship with Cadmium Accumulation

Effects of Cd on gas-exchange parameters of switchgrass

As shown in S1, the gas-exchange parameters (Pn, E, Gs and Ci) of 14 switchgrass cultivars were significantly inhibited under Cd stress ($P < 0.01$). Significant differences were exhibited among the cultivars ($P < 0.01$). The Pn of lowland types (Alamo, Bomaster, Kanlow) was higher than other upland types (Figure S1 a), while the Gs, E, and Ci of lowland types (Alamo, Bomaster, Kanlow) were lower than upland types (Figure S1 b, c, d).

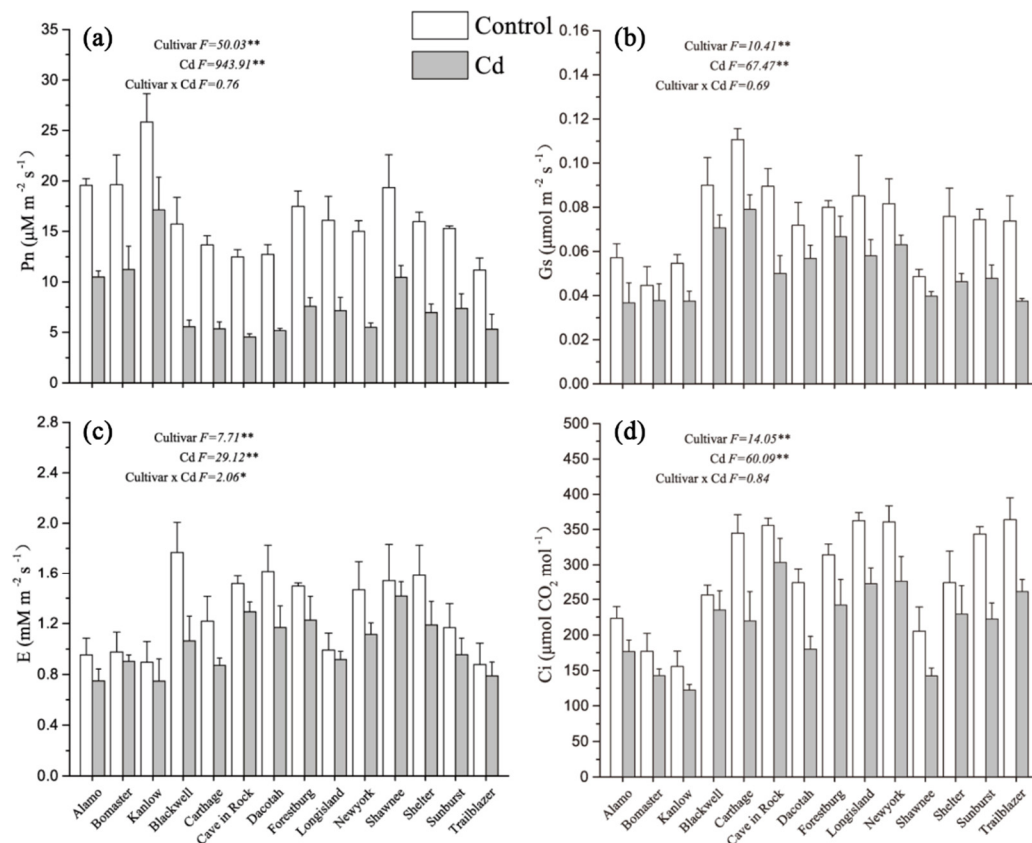


Figure S1. Effect of cadmium on photosynthesis of switchgrass. Pn: Net photosynthetic rate (a), Gs: Stomatal conductance (b), E: Transpiration rate (c), Ci: Intercellular CO₂ concentration (d). Values are means \pm SE ($n = 6$). $^{**}P < 0.01$. ns, not significant (Duncan's test).

Biomass of switchgrass

As showed in Figure S2, the biomass of roots and shoots was significantly inhibited under Cd stress, significant difference was observed among cultivars. The maximum biomass value of roots and shoots was cultivar Kanlow under Cd stress, and the minimum was cultivar Trailblazer in root and Long Island in shoot (Figure S2 a and b).

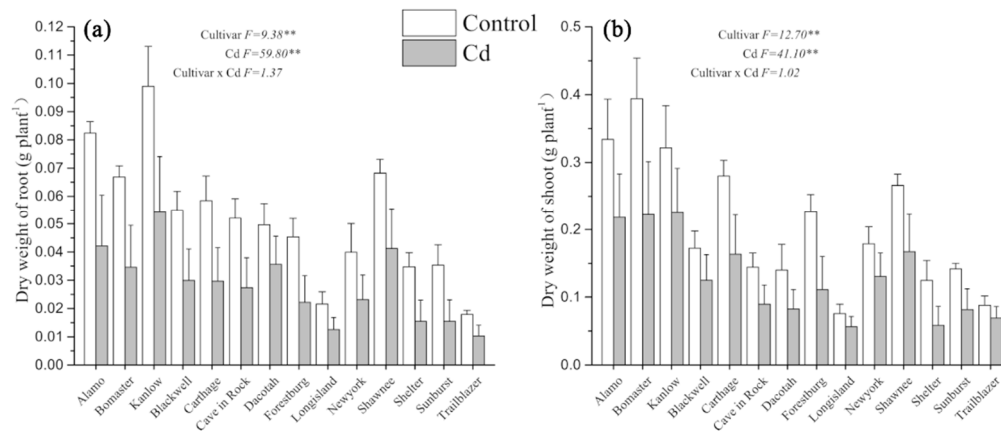


Figure S2. Biomass of root (a) and shoot (b) of switchgrass under Cd stress. Values are mean \pm SE (n = 3). $^{**}P < 0.01$ (Duncan's test).