



Fig. S1. The settings and scale of microcosms (constructed ditches).

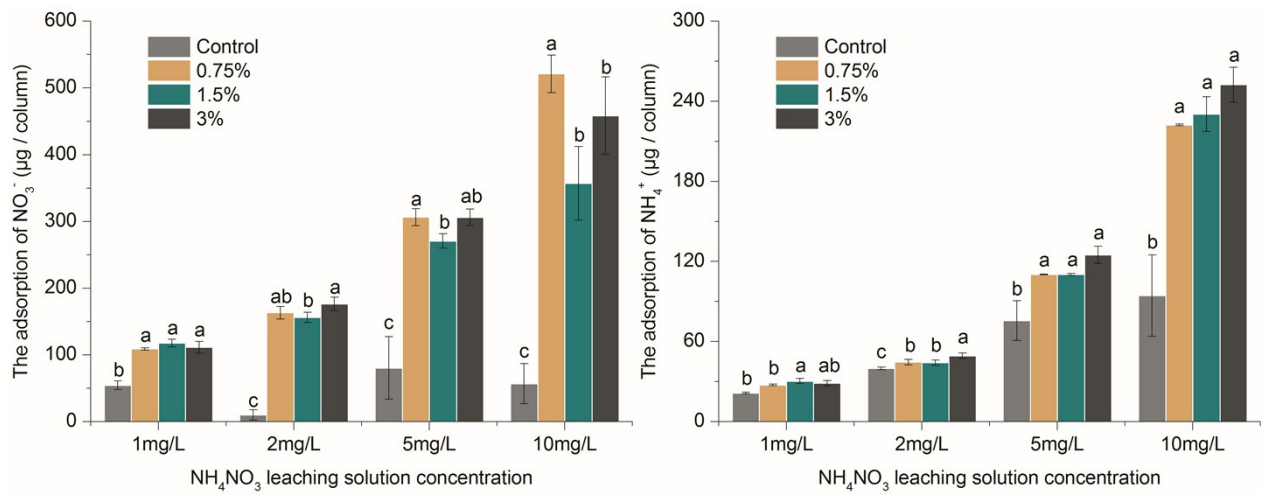


Fig. S2. Adsorptions of inorganic nitrogen ($\mu\text{g} / \text{column}$) of four treatments with different biochar addition ratios (by mass) during soil column leaching experiment: “Control” refers to “sediment only”; “0.75%” refers to “sediment +0.75% biochar”; “1.5%” refers to “sediment +1.5% biochar”; “3%” refers to “sediment +3% biochar”. Horizontal axis indicates the concentration of NH_4NO_3 leaching solution. Data points are means \pm SD (standard deviation) ($n=3$). Different letters indicate significant differences among different treatments at $P < 0.05$ (ANOVA, LSD tests).

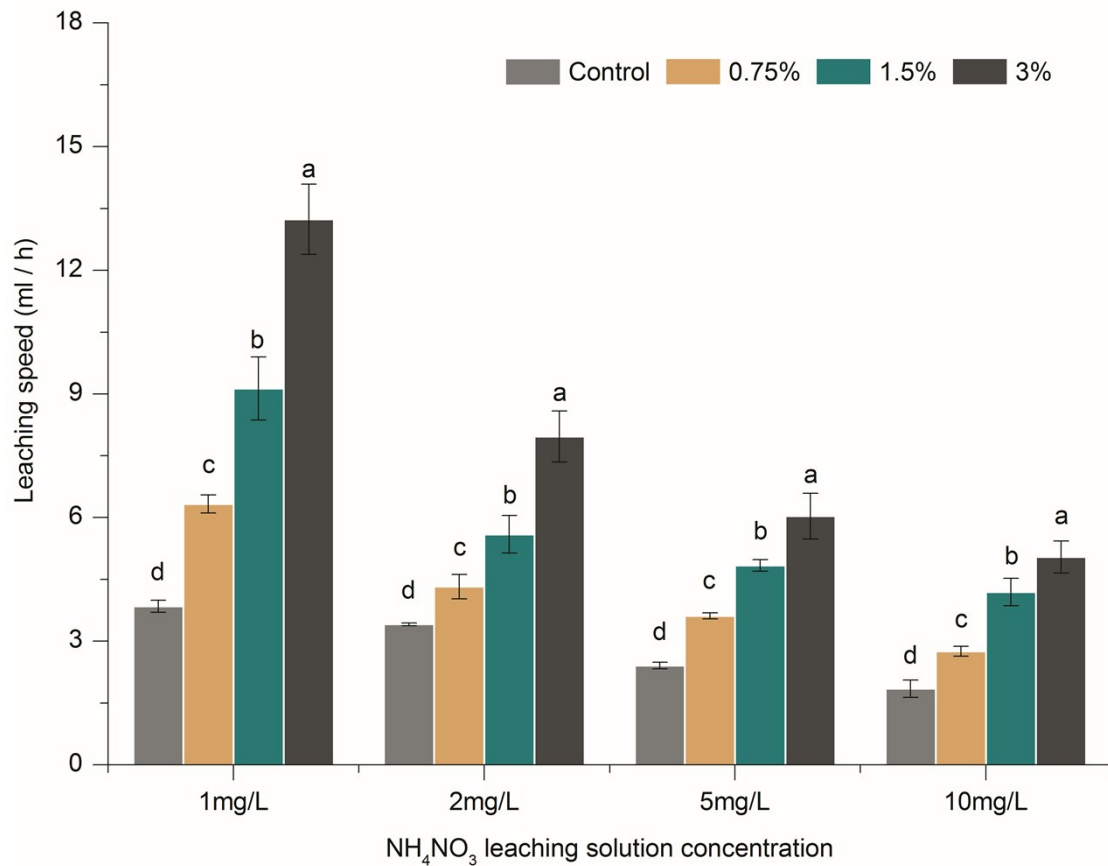


Fig. S3. Leaching speed (ml / h) of four treatments with different biochar addition ratios (by mass) during soil column leaching experiment: “Control” refers to “sediment only”; “0.75%” refers to “sediment +0.75% biochar”; “1.5%” refers to “sediment +1.5% biochar”; “3%” refers to “sediment +3% biochar”. Horizontal axis indicates the concentration of NH₄NO₃ leaching solution. Data points are means ±SD (standard deviation) (n=3). Different letters indicate significant differences among different treatments at $P < 0.05$ (ANOVA, LSD tests).