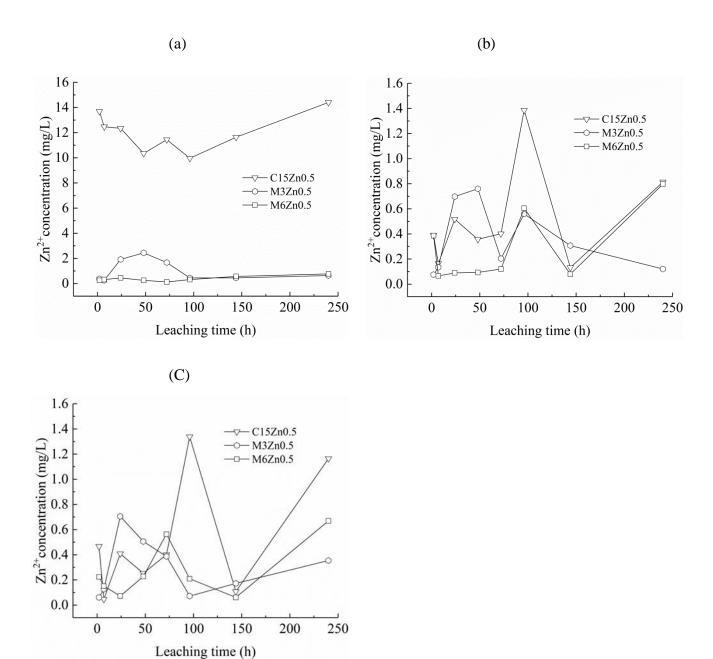
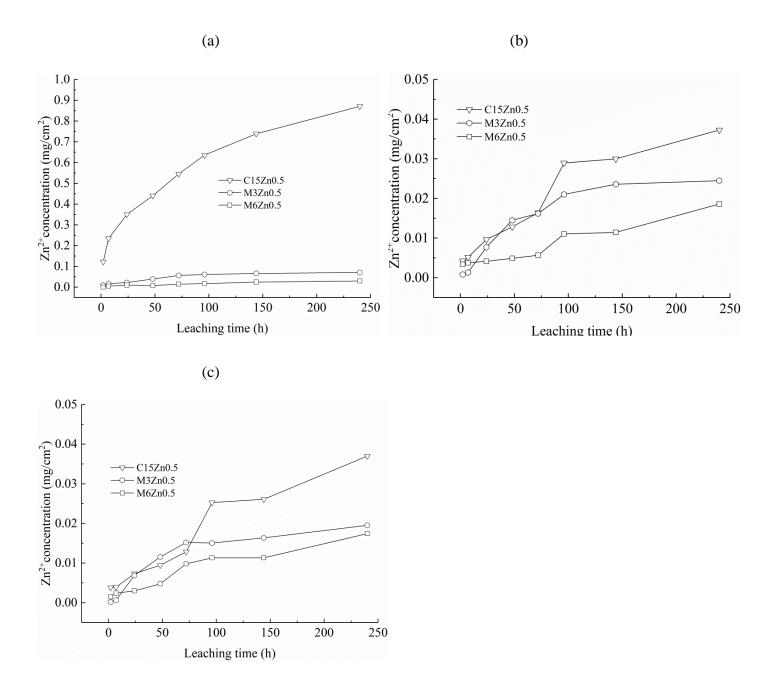
## **Supplementary Materials**



**Fig. S1.** Variation in  $Zn^{2+}$  concentration with leaching time during semi-dynamic leaching test (Ding [31]) (a) Initial pH = 2, (b) Initial pH = 4, (c) Initial pH = 7.



**Fig. S2.** Total dissolved  $Zn^{2+}$  on the surface of the solidified zinc-contaminated soil sample (Ding [31]), (a) Initial pH = 2, (b) Initial pH = 4, (c) Initial pH = 7.