



Effects of biochar on organic nitrogen mineralization of Northeast forest soil

Siyao Du (1), Jun Tao (2), and Xianxiang Luo (3)

(1) Academy of Disaster Reduction and Emergency Management, Beijing Normal University, Beijing, 100875, China, (2) Academy of Disaster Reduction and Emergency Management, Beijing Normal University, Beijing, 100875, China, (3) College of Environmental Science and Engineering, Ocean University of China, Qingdao, Shandong 266100, China

These years, Biochar, as a new environmental functional material, received widespread attention of scholars both in China and abroad. Biochar is applied as a soil conditioner which is because it will improve the soil texture and increase plant yields. But the influence of nitrogen cycle while biochar is added to the forest soil is still controversial. This article takes forest soil as the object of research, aiming at learning the effects of different biochar on nitrogen mineralization of forest soil, and that in the case of different incubation temperature. The results show that it can reduce the net mineralization of soil organic nitrogen. That means the addition of biochar could suppress the mineralization of forest soil organic nitrogen. In a certain range, high temperature significantly facilitates the mineralization of soil organic nitrogen while the existence of biochar also inhibits that.