CHARACTERIZATION OF ALKALINE PHOSPHATASE FROM A SANDY LOAM SOIL

Shahid Mahmood, Muhammad Arshad and Zahir Ahmad Zahir

ABSTRACT

Alkaline phosphatase (AlkP 3.1.3.1) activity of sandy loam soil using p-nitrophenyl phosphate, as substrate was determined. Maximum phosphatase activity was observed at 40°C and was significantly and positively correlated with temperature of incubation. The highest activity with buffer solution of pH 11 was also significantly and positively correlated. The activity was a linear function of incubation time up to 6 hrs and then it decreased. Maximum activity was observed at field capacity and was a quadratic function of moisture contents.