



Effects of spent mushroom compost, sulfur and N- fertilizers on Soil phosphorus availability

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During a two years field experiment, the effects of Spent Mushroom Compost (SMC), Sulfur(S) and three kinds of N- fertilizers on Soil Olsen-P were investigated. The treatments consisted of 4 levels of S (0-8-16 and 32 tons/ha), 3 levels of SMC (0-20 and 40 tons/ha) and 3 kinds of N-fertilizers (Urea, Am. Sulfate and Am. Nitrate). These amendments were added to the each plot separately at the first year. Corn; Zea mayes L704, was used as test plant. More than 110 tons/ha yield were harvested at each year. After each harvest, soil samples were taken from each of 144 plots and were used for chemical analysis. Wet weights, TOC, TN, pH, EC, available K and Olsen-P were measured and the results were used for the statistical calculations. Original Olsen-P was 2.15 mg/kg. At the end of first and second year, this parameter varied between 6.58-16.08 and 5.65-13.17 mg/kg respectively, which are much greater than the original Olsen-P. So, it may be concluded that the treatments were well chosen and effective.

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