ABSTRACT

The experiment was conducted at Dry Farming Research Station, Targhadia (Gujarat) to study the effect of bio inoculants (Compost culture, PSM and Azotobacter) and natural amendments (rock phosphate and iron pyrite) on nutritional composition of compost. The samples were drawn after 30, 60 and 90 days after composting. The organic carbon and C/N ratio decreased during maturation of the compost irrespective of treatments. At 90 days, minimum organic carbon (20.46 %) and C/N ratio (9.39) was recorded with incorporate RP + MI + urea + Pyrite @ 5% on weight basis (T6).

Irrespective of treatments the total content of N, P, K S and micronutrients (Fe, Zn, Mn, Cu) were increased with advancement in maturity period of composting and their highest values were observed with RP @ 1 % P2O5 + MI (compost culture-Azotobacter, PSM) @ 500 g/t + urea @ 0.5% + Pyrite @ 5 % on weight basis of crop residues.

Key words: Farm waste decomposition, Resource management, Bio inoculants and natural mineral amendments