

Incubation Study on Effect of Incorporation of Crop Residue along with Microbial Consortium on MBC and soil microbial population

A J Suvarna Latha, P Ratna Prasad, N Trimurtulu and V Srinivasa Rao

Department of Soil Science & Agricultural Chemistry, Agricultural College, ANGRAU, Bapatla.

ABSTRACT

An incubation experiment was conducted to study the decomposition and its influence on soil health in polyhouse with residue incorporation along with microbial consortium for 90 days to find out the influence of crop residues on MBC and microbial populations. The MBC and microbial populations assayed at different intervals were significantly increased by the application of crop residue along with microbial consortia in residue treated pots either alone or in combination with microbial consortia and starter dose of N and P fertilizers as decomposition accelerators than in treatment that received RDF. Among the treatments, the highest MBC and microbial population were recorded with the treatment T₇, which received crop residue @1.5 t ha⁻¹ + Microbial consortium@2 kg t⁻¹+ urea 3 kg t⁻¹ + SSP 15 kg t⁻¹ of residue incorporated was at par with T₆ and T₃ during both the years of the experimentation.

Keywords: *Crop residue, microbial biomass carbon, microbial consortium and soil micro flora.*