Effect of Long-Term Fertilization on Nutrient Content, Uptake and yield of Cotton

P Joga Rao, P R K Prasad, A Lalitha Kumari, P Prasuna Rani and Ch Pulla Rao
Department of Soil Sciience and Agricultural Chemistry, Agricultural College, Bapatla 522 101,
A P

ABSTRACT

The experiment was under taken during 2013-14 to study the effect of long-term use of manures and fertilizers on nutrient content and uptake in cotton at harvest stage. The results of the investigation indicated that the application of 100% recommended dose of NPK + FYM 10 t ha⁻¹ recorded significantly higher kapas yield and uptake of nutrients by cotton crop which was followed by 150 per cent recommended dose of NPK. The kapas yield of cotton,with 100% NPK + FYM 10 t ha⁻¹ was 132.3 per cent increase over control. Application of recommended dose of 100% N alone through fertilizers decreased the yield and uptake of nutrients significantly over 100% recommended dose of NPK + FYM 10 t ha⁻¹. Maximum content and accumulation of N, P, K, Fe, Mn and Cu in cotton were noticed in the treatment of 100% NPK + FYM 10 t ha⁻¹.

Key words: FYM, Long-term fertilization, Kapas yield, Nutrient content, Uptake.