An Asian Journal of Soil Science, **(June, 2010) Vol. 5 No. 1 : 134-137**

Research Paper :

Integrated nutrient management for sustainable groundnut cultivation in Theri soil

K.MANIKANDAN AND V. SUBRAMANIAN

Accepted : *April, 2010*

See end of the article for authors' affiliations

Correspondence to :

K. MANIKANDAN
Directorate of Mushroom Research,
CHAMBAGHAT (H.P.)
INDIA

ABSTRACT

A field experiment was conducted in theri soils of Tamil Nadu to study the effect of various organics and inorganic fertilizers on the yield and quality of groundnut. Six different organics *viz.*, raw coir pith (RCP), composted coir pith (CCP), goat manure (GM), farm yard manure (FYM), poultry manure (PM) and bio-digested press mud (BDP) were utilized using groundnut *var* VRI 2 as a test crop. The result indicated that application of recommended NPK+BDP @ 7.5 t ha^{-1} produced the maximum pod yield. The highest oil yield was recorded in the treatment receiving recommended NPK+PM @ 5 t ha^{-1}. The BDP application in combination with recommended NPK significantly improved the quality of groundnut oil compared to other organics applied. The significant increase in soil available nitrogen, phosphorous and potassium was observed in all treatments that received organics and inorganic fertilizers. There was no significant improvement in organic carbon as well as physical properties of the soil whereas physico-chemical properties such as soil reaction and electrical conductivity were significantly influenced by various INM treatments.

Key words : Theri soil, Coir pith, Goat manure, Poultry manure, Bio-digested press mud