Research Article

Soil fertility status as influenced by incorporation of black gram (Vigna mungo) residues

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Summary

A study was undertaken during the period 2009 - 2010 and 2010 - 2011 to monitor the changes of soil pH, organic carbon and available NPK status after harvest of black gram followed by incorporation of residues into the respective treatment for a period of 45 days under field condition. Results have shown that soil pH slightly increased than initial after 45 days of incorporation irrespective of treatments. Moreover, bulk density decreased to 1.24 g/cc than initial. Organic carbon and available NPK content in soil increased progressively after each year. The treatment comprised of stale bed practice, 75 per cent of recommended NPK fertilizer along with biofertilizers in presence of FYM increased the mean organic carbon content, available N, P and K by 0.26%, 22.3 kg/ha, 2.7 kg/ha and 37.9 kg/ha, respectively, over initial.

Key words : Available NPK, Bulk density, Incorporation, Organic carbon, Soil pH