EFFECT OF ORGANIC AND MINERAL FERTILIZATION ON CONCENTATIONS OF N, P AND K AT LEAVES OF POTATO

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ABSTRACT

A Field experiment was Conducted in a private Field at Al- Latifiya, on a Loamy soil at autumn season 2009, to study the effect of (Cow, sheep and chicken residues at levels of 100%, 50% and 33.3% of recommended quantity which was 50 T.ha⁻¹ of each source of residues. Three levels of mineral fertilizers were used, Which were (0, 50 % and 100 %) 0f recommended fertilizers which were (240: 120: 400) Kg NPK.ha⁻¹ respectively, on the concentrations of N, P and K at leaves in vegetative growth, A Randomized complete block design (RCBD) was used at three replications, total yield was determined, The results showed that: A significant incensement in N, P and K concentration (4.87, 0.56 and 4.47%) respectively for the treatment (33.3 % cow, 33.3 % sheep and 33.3 % chicken) residues. Concentrations of N, P and K were (5.11, 0.59 and 4.62 %) when mineral fertilizers were used at rates of (240 - 120 - 400) Kg NPK.ha⁻¹. The concentrations of N, P and K of the interaction between above organic and mineral fertilizers gave high concentrations of N, P and K at leaves which were (5.40, 0.65 and 4.89 %) respectively.

Key words : Organic , Mineral , Vegetative , Potato .