Effect on nutrient uptake by winter maize (*Zea mays* L.) crop after using integrated management of organic manure with rice-crop establishment methods

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Summary

A field experiment was conducted in South Kisan Vidhya Peeth Block of Crop Research Centre of Rajendra Agricultural University, Bihar, Pusa (Samastipur) during the *Rabi* season of 2011-12. The experimental plot was medium land, properly leveled, and well drained with uniform topography. The experiment was conducted in a Split plot design with 30 treatments, which were replicated three times. To study the effect on nutrient uptake by maize (*Zea mays* L.) crop after using integrated management of organic manure with rice-crop establishment methods. The main plot treatments consisting of six methods of rice-crop establishment *A*1 (*ZT*), *A*2 (*DS*), *A*3 (*PDS*), *A*4 (*PT*), *A*5 (*SRI*) and *A*6 (*PT + BM*) and the sub plot treatments consisting of five different form of the organic matter enrichment *i.e.*, *B*1 (*M*), *B*2 (*Vc*), *B*3 (*1/3CR*), *B*4 (*M+Vc*) and *B*5 (control).

Key words: Winter maize, Physical property, Zero tillage, Dry seeded, Drum seeder, Puddled transplanted, System of rice-intensification, Brown manuring, Mulching, Vermi compost and Crop residue