Long term effect of integrated nutrient management on growth, yield, uptake of nutrients and economics of groundnut

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A field experiment was conducted at Main Centre for Integrated Farming System Research located at Agricultural and Horticultural Research Station, Kathalagere, Davanagere (Karnataka), India comes under the Southern Transitional Zone of Karnataka (Zone-7) during summer 2007 to 2012 under protective irrigation condition of Bhadra Command area to study the effect of integrated nutrient management on growth, yield, uptake of nutrients and economics of groundnut production. The results revealed that application of 100% NPK+secondary and micro-nutrients based on soil test (10 kg ZnSO₄ ha⁻¹) has recorded higher dry pod yield (1953 kg ha⁻¹), kernel yield (1555 kg ha⁻¹), haulm yield (3617 kg ha⁻¹), harvest index (0.57), net returns (Rs. 71717) and benefit cost ratio (2.34) as compared to all other organic farming practices. This might be due to higher growth and yield attributes such as plant height (57.86 cm), number of branches plant⁻¹ (7.20), pods plant⁻¹ (30.12), dry pod weight (29.32 g plant⁻¹), 100 pod weight (28.50 g) and shelling percentage (79.64). Thus, the treatment receiving 100% NPK+secondary and micro-nutrients based on soil test (10 kg ZnSO₄ ha⁻¹) is better for realizing higher growth, yield attributes, yield and net returns as compared to all other organic farming packages.

Biography
Parashuram Chandravanshi completed his PhD in Soil Science and Agricultural Chemistry at University of Agricultural Sciences, Bangalore. He became Assistant Professor in 2007 and completed 11 years in teaching, research and extension. Presently, he is working as Senior Farm Superintendent at ZAHRS, Hiriyur under University of Agricultural and Horticultural Sciences, Shivamogga. He worked as Junior Soil Scientist under All India Co-ordinated Research Project (ICAR) for a period of four years and conducted nearly about 35 research experiments on soil health management, nutrient studies, and soil and tillage conservation methods. During four years of extension services many technology has been transformed through field demonstrations, on farm technology and on farm testing research trails in the farmers’ field and research stations. He has also worked as station superintendent for the period of three years for identifying tools for effective farm management tools. During 11 years of his services, he has attended national and international conferences and published 15 research papers, 15 research abstracts, 10 research notes and 15 technical bulletins and 2 book chapters in national and international journal.

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