Role of organic farming on yield and economics of bottle gourd after vegetable pea

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Abstract: A study was carried out for three consecutive years during rainy season of 2007 to 2009 at Vegetable Research Station, Kalyanpur, C.S. Azad University of Agriculture and Technology, Kanpur. The main objective was to find out the suitable combination of organic amendment with doses of chemical fertilizers to enhance the bottle gourd production on nutrient deficient soil during rainy season. The summarized results of three years experiment indicate that bottle gourd responded to the application of vermi compost @ 2.5 t+50 per cent RDF, which was registered significantly higher fruits yield (177.52 q/ha) over other nutrients combination. The growth and yield trails noted in bottle gourd under different integrated doses of nutrients were concordant to the fruits yield of bottle gourd. Therefore, integration of vermi compost @ 2.5 t/ha with 50 per cent RDF/ha through chemical fertilizer can be used for higher production of fruits of bottle gourd during rainy season.

Key Words: Organic farming, Bottle gourd, Vegetable pea, Vermicompost, FYM, Neem cake


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INTRODUCTION

With the continuous application of chemicals since the last green revolution, the soil and its fertility is showing the sign of fatigue and plants developing resistance to insect pests and diseases is breaking down and causing overall pollution to soil and water. Hence, the farmers and consumers are looking for environmentally friendly avenues to overcome this problem and in recent days and organic farming seems to be creating awareness among farmers and consumers alike. Organic farming is one alternative farming system to conventional farming practiced and has scope in appropriate regions. It is a production system in which use of synthetically compounded fertilizers, pesticides, weedicides, growth regulators, live stock feed additives are either avoided or excluded. It stands for commitment to a system of farming that strives balance with nature using methods and materials that have a low impact on the environment. The scientific data on organic farming are scanty but three is a treasure of conventional experience with the farmers which can be used profitably to strengthen organic farming.

According to Veeress (2004), organic farming is farming without chemicals, but this seems to be incomplete because organic farming centers around living systems where the soil, plant and animal including men are bound to wheel of life where the process of growth and the process of decay balance each other. In its most developed form, organic farming is both a philosophy and a system of agriculture which includes all agricultural systems that promotes the environmentally, socially and economically sound production of food and fiber.

MATERIALS AND METHODS

A field trial was conducted for three consecutive years during rainy season of 2007-2008 to 2009-2010 at Vegetable Research Station, Kalyanpur, C.S. Azad University of