

Effect of different nutrition on post harvest studies in soybean

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ABSTRACT

A field investigation entitled effect of different nutrition on post harvest studies in soybean was conducted at AICRP for Dryland Agriculture, M.A.U., Parbhani. The experiment was laid out in Randomized Block Design (RBD) with three replications. There were eight treatments viz., T₁ -75 % RDF without FYM, T₂ -75 % RDF with FYM @ 5 t/ha, T₃-100% RDF without FYM, T₄-100% RDF with FYM @ 5 t/ha, T₅-125% RDF without FYM, T₆-125% RDF with FYM @ 5 t/ha, T₇- FYM @ 10 t/ha and T₈- Absolute control. Growth attributes viz., number of pod and nodule were significantly more in treatment T₄ (100% RDF + 5 t FYM/ha). The grain yield and straw yield were significantly more in treatments T₄ (100% RDF + 5 t FYM/ha). Based on the results it can be concluded that the treatment T₄ (100% RDF + 5 t FYM/ha) was found beneficial in improving growth, yield attributes, yield of soybean GMR and NMR as compared to other treatments. Treatment T₄ (100% RDF + 5 t FYM/ha) recorded double yield than absolute control.

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INTRODUCTION

Soybean is a legume crop they fixes atmospheric nitrogen. It sheds about 32 to 35 per cent of crop residue at the time of harvest, which help in increasing the soil fertility and soil physical condition. Hence, soybean crop also called as miracle crop. The pulses and the vegetable oil are the inseparable parts of Indian diet. The per capita availability of the pulses and oil in India 32 and 12 g day⁻¹ as against recommended level of 85 and 45 g day⁻¹, respectively (Anonymous, 1968). This clearly indicated that there is a wide scope for expansion of area under oilseed crop.

Maharashtra ranks second in production of soybean after Madhya Pradesh in the country. Soybean has profitably replaced the main pulses of state like mung bean and black gram. Soybean was introduced in Maharashtra state during the year 1984-1985 and it was grown only on 5.6 lakh hectare till 1994 but today the area is increasing rapidly. Among the various division in Maharashtra, Nagpur division having larger area and highest production. But productivity was maximum in Kolhapur division.

At present FYM which is organic source helps in increasing the yield of crop. So the different nutrient combinations help in increasing yield as well as soil

physical condition. Nutrient are second most important limiting factor of crop production after water. Most of the soil in the rainfed regions are not only thirsty but also hungry. The nutrient demand of crop should be met from application of recommended dose of fertilizer as well as FYM application with this view, the study was taken.

RESEARCH METHODOLOGY

The details of the material used and methods adopted during the course of investigation are presented in this paper.

Treatment details (Fertility level 8)

T ₁	75% RDF without FYM
T ₂	75% RDF with FYM @ 5 t/ha
T ₃	100 % RDF without FYM
T ₄	100% RDF with FYM @ 5 t/ha
T ₅	125% RDF without FYM
T ₆	125% RDF with FYM @ 5 t/ha
T ₇	FYM @ 10 t/ha
T ₈	Absolute control
RDF (100%) = 30 : 60 : 30 kg NPK/ha	

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