



Performance of Red Gram(*Cajanus cajan*) under Rain fed Situation in district Mahabubnagar

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ABSTRACT

The cluster frontline demonstration on red gram was conducted in five villages namely Kasimnagar, Mettupally, Dataipally, Anjanagiri and Mallaipalle of Wanaparty and Pangal districts during *kharif* season of 2013-14 to 2016-17. The pooled results of 3 yr revealed that a short duration variety of red gram PRG 176 + seed treatment (*Trichoderma viridi* 8g/kg seed + *Rhizobium* sp. 1kg/ha seed) + plant protection (Pheromone trap 8 no./ha + insecticide: Acephate@1.5g/l + DDVP@1ml/l) recorded average highest yield 1299 kg/ha compared to 839 kg/ha in control plot. The same trend was in case of gross and net monetary returns, which was Rs. 57,060/- and Rs. 35,890/-ha and for control Rs. 39,624/- and Rs. 20,305/-ha, respectively. Benefit cost ratio for demonstration and control was 2.79 and 2.02, respectively. It can be concluded that the red gram production could be enhanced by encouraging the farmers through adoption of recommended technologies which were followed in the CFLDs.

Key Words: Demonstration, Red gram, Grain yield, Integrated pest management.

INTRODUCTION

India is the largest producer, consumer of Pigeon pea (*Cajanus cajan*) and this is second most popular pulse crop after chick pea cultivated throughout India. It has multiple uses and occupies an important place in the prevailing farming systems in the country. It plays an important role in sustainable agriculture by enriching the soil nutrients through biological nitrogen fixation. In addition, because of its deep root system it is a boon for the farmers to grow under rainfed condition.

Telangana is one of the major pigeon pea growing state in the country with 2.8 lakh ha with 1.29 lakh tonnes with average productivity of 419 kg/ha (Anonymous, 2015). Indian government imports large quantity of pulses to fulfil domestic requirement of pulses. In this regard, to sustain this production and consumption system, the Department of Agriculture, Cooperation and

Farmers Welfare had sanctioned the project Cluster Frontline Demonstrations on Pulses to ICAR-ATARI, Hyderabad through National Food Security Mission. This project was implemented by Krishi Vigyan Kendra, Madanapuram of Zone-X with main objective to boost the production and productivity of pulses through CFLDs with latest and specific technologies.

Red gram is cultivated under rainfed condition in *kharif* season and the predominant pulse crop normally grown in the Mahabubnagar district in 1,13,735 ha. Farmers of this region are cultivating Pinky, a predominant local traditional variety grown on large area which is susceptible to wilt. Hence, a short duration variety of Red gram PRG176 having crop duration of 150-165d has introduced to withstand prolonged dry spells and drought and to test the performance of this variety compared to local traditional variety pinky.