

Effect of Different Pre and Post Emergence Herbicides on Yield and Economics of Direct Sown Rice

B Jyothi Basu, P V N Prasad, V R K Murthy, Y Ashoka Rani and P R K Prasad

Department of Agronomy, Agricultural College, ANGRAU, Bapatla

ABSTRACT

A field experiment was conducted for two consecutive years (2015-16 and 2016-17) at Agricultural College Farm, Bapatla to find out the efficacy of different weed control methods on yield and economics of direct-sown rice. Fourteen treatments were tested in randomized block design with three replications. Among all the herbicidal treatments, pre emergence application of bensulfuron methyl @ 60 g a.i. ha⁻¹ + pretilachlor with safener @ 500 g a.i. ha⁻¹ *fb* post emergence application of azimsulfuron @ 20 g a.i. ha⁻¹ at 25 DAS *fb* post emergence application of metsulfuron methyl and chlorimuron ethyl @ 4 g a.i. ha⁻¹ applied at 45 DAS (T₉) realized the highest grain yield of 5107 and 5313 kg ha⁻¹, net returns of Rs. 42513 and Rs. 47801 ha⁻¹ and return per rupee investment of 1.12 and 1.22 during 2015-16 and 2016-17

Keywords: *Direct sown rice, Yield, net returns, Gross returns and Return per rupee investment*