Growth Parameters of Direct Sown Rice as Influenced by Different Weed Management Practices

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 to study the effect of sequentially applied herbicides on growth and yield of direct sown rice was carried out at at Agricultural College Farm, Bapatla during *kharif* 2015-16 and 2016-17. Pre emergence application of bensulfuron methyl + pretilachlor with safener *fb* post emergence application of azimsulfuron at 25 DAS *fb* post emergence application of metsulfuron methyl and chlorimuron ethyl at 45 DAS (T_9) recorded significantly maximum number of tillers (563 and 573 No. m^{-2}), higher dry matter 11931 and 13556 kg ha^{-1}) at harvest during both the years respectively and it was on par with Pre-emergence application of bensulfuron methyl @ 60 g a.i. ha^{-1} + pretilachlor with safener at 500 g a.i. ha^{-1} *fb* post-emergence application of bispyribac-sodium @ 25 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 (T_{10}) and Pre-emergence application of pyrazosulfuron ethyl @ 25 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 (T_7), which was however inferior to weed free treatment (T_{13}). The lowest dry matter accumulation and yield over rest of the treatments was associated with weedy check (T_{14}).

Key words: *Direct sown rice, Weed management, Tillers, Drymatter accumulation, Grain yield and Straw yield*