RESEARCH COMMUNICATION

PERFORMANCE OF COMBINATION OF HERBICIDES ON GROWTH FACTORS, YIELD AND ENERGETICS OF TRANSPLANTED RICE (*ORYZA SATIVA* L.)

Bharati Sahu*, G.K. Shrivastava and A.P. Singh

Department of Agronomy,
Indira Gandhi Krishi Vishwavidyalaya, Raipur- 492012, (Chhattisgarh), India
Email: bharati5594@gmail.com

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Abstract: A field experiment was carried out during *Kharif* 2013-2014 at the Instructional-Cum Research Farm, Indira Gandhi Krishi Vishwavidyalaya, Raipur (C.G.).The soil of the experimental field was sandy loam in texture. The soil was neutral in pH low in low in nitrogen, medium in phosphorus and potassium content. The experiment was laid out in randomized block design, comprising three replications and twelve treatments. The results revealed that hand weeding at 25 and 45 DAT registered maximum growth characters of rice like dry matter, number of tillers hill^{-1}, yield and energetics. It was followed by treatments bispyribac-Na + (chlorimuron-ethyl+ metsulfuron-methyl) @ 20 + 4 g ha^{-1} at 25 DAT (T_5) and bispyribac-Na+ ethoxysulfuron @ 25 + 18.75 g ha^{-1} at 25 DAT (T_4) and minimum was observed under weedy check (T_{12}).

Keywords*:* Ethoxysulfuron, Number of tillers, Transplanted rice, Grain yield, Energetics

REFERENCES

Azad, B.S., Singh, H. and Bhagat, K.L. (1990). Efficacy of Oxyflurofen in controlling weeds in transplanted rice. *Oryza* **27**(4): 457-459.

Bali, A.S., Singh, M., Kachroo, D., Sharma, B.C. and Shivran, D.R. (2006). Efficacy of herbicides in transplanted,medium-duration rice (*Oryza sativa* L.) under subtropic conditions of Jammu. *Indian Journal of Agronomy* **51**(2): 128-130.

Balaswamy, K. (1999). Effect of urea forms and herbicides on weed competition and density in transplanted rice. *Journal of Research, ANGRAU*, **27**(3): 5-11.

Halder, J. and Patra, A.K. (2007). Effect of chemical weed control methods on productivity of transplanted rice. *Indian Journal of Agronomy* **52**(2): 111-113.

Mittal,V.K., Mittal, T.P. and Dhawan, K.C. (1985). Research digest on energy requirements in Agriculture sector (1971-82) ICAR/AICARP/ERAS/ **85**(1).Ludhiana: 159-163.

Singh, V.P.,Singh, G. and Singh, M. (2004). Effect of fenoxaprop- P- ethyl on transplanted rice and associated weeds.Indian Journal of Weed Science **36** : 190-192.

*Corresponding Author