

## **Effect of weed control and sowing methods on weed dynamics and yield of little millet (*Panicum sumatrense*) under rainfed condition**

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**ABSTRACT :** Experiments were conducted at Agricultural Farm, College of Agriculture, Rewa, Madhya Pradesh to find out the effect of different methods of crop and weed control measures on weeds, crop growth, yield attributes and yield of little millet (*Panicum sumatrense*). The results of two years study showed that sowing of little millet crop by providing wider row to row, plant to plant spacing and sowing of sunhemp in between little millet rows, which was later harvested at 20DAS and used as mulch proved significantly superior than other methods of sowing. Among the options of controlling weed, Integrated weed control (Herbicide+One hand weeding at 30DAS) was found most effective in controlling weed. The percentage decrease in the weed population of major weeds like *Cyperus irria*, *Cynodon dactylon* and *Echinochloa crusgalli* was 91.64%, 92.65% and 95.34%, respectively up to 45DAS stage. The interaction effect of different sowing methods and weed control measures had significant variation on weed population of individual weeds under study and revealed that adoption of treatment combination M<sub>2</sub>W<sub>4</sub> recorded lower weed population over rest of the treatment combinations. Out of different methods of crop establishment, M<sub>2</sub> brought about significantly higher grain yield (1048.75 kg/ha) and straw yield (2909.25 kg/ha). Whereas, the highest B:C ratio of 1.83 was obtained under delayed sowing of crop (M<sub>3</sub>).

**Key Words :** Little millet (*Panicum sumatrense*), weed dynamics, integrated weed control, sowing, yield.