



RESEARCH PAPER

Integrated weed management in pearl millet [*Pennisetum glaucum* (L.) R. Br.]

Manoj Kumar*, R.C. Meena and C. Tara Satyavathi

ICAR-AICRP on Pearl Millet, Agricultural Research Station, Mandor, Jodhpur (Rajasthan) India
(Email: mkagro86@gmail.com)

Abstract : The scarcity of labour in agriculture and change in behaviour, weed management in rain fed pearl millet is very difficult. Further, to improve/ fine tune the existing recommendation of weed management in pearl millet, this experiment was planned. A field experiment was carried out during the rainy (*Kharif*) seasons of 2012 to 2014 in sandy loam soils at ICAR-All India Coordinated Research Project on Pearl Millet, Research Farm, Agricultural Research Station, Mandor, Jodhpur (Agriculture University, Jodhpur), to evaluate the effect of integrated weed management in rainfed pearl millet (*Pennisetum glaucum* L.) with pre-emergence application of atrazine 0.5 kg/ha + 1 HW at 35 DAS, four levels of post-emergence application of atrazine (0.1, 0.2, 0.3 and 0.4 kg/ha) along with one hand weeding at 35 DAS, two hand weeding and hoeing (at 20 and 40 DAS). Eight treatment combinations were laid out in randomized block design in four replications. All weed management practices caused significant improvement in grain and dry fodder yield of pearl millet compared to the weedy check (1943 kg/ha and 30.86 q/ha). The best treatment was found weed free and it was followed by post emergence application of Atrazine @ 0.4 kg/ha. In comparison to the weed dry matter recorded at harvest with weedy check (547.1 kg/ha), all weed management practices recorded quite lower dry matter of weeds and were found to be at par in managing weeds compared to the weed free plot. Efficiency of post emergence application of Atrazine @ 0.2, 0.3 and 0.4 kg/ha was found more better in controlling weeds than the recommended practice of managing weeds by pre emergence application of Atrazine. Weed control efficiency were also found higher in weed free and it was followed by two hand weeding and post emergence application of Atrazine @ 0.4 kg treatments, respectively.

Key Words : Atrazine, Pearl millet, Post-emergence, Pre-emergence, Weed control efficiency

View Point Article : Kumar, Manoj, Meena, R.C. and Tara Satyavathi, C. (2022). Integrated weed management in pearl millet [*Pennisetum glaucum* (L.) R. Br.]. *Internat. J. agric. Sci.*, **18** (1): 231-234, DOI:10.15740/HAS/IJAS/18.1/231-234. Copyright@ 2022: Hind Agri-Horticultural Society.

Article History : Received : 23.08.2021; Revised : 25.09.2021; Accepted : 19.10.2021