

## Bio-efficacy of fenoxaprop-p-ethyl 9 EC for grassy weed control in groundnut (*Arachis hypogaea*)

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### SUMMARY

Groundnut crop is highly susceptible to weed infestation because of its slow growth in this initial stage up to 40 days, short plant height and underground pod habit. A field experiment was conducted for two consecutive years (*Kharif* 2011 and 2012) at instructional farm of Rajasthan College of Agriculture, Udaipur, Rajasthan to study the bio-efficacy of fenoxaprop-p-ethyl 9 EC for grassy weed control in groundnut. The experiment was laid out on sandy clay loam soil by adopting Randomized Block Design which included six treatments *viz.*, T<sub>1</sub>= Fenoxaprop-p-ethyl 9EC at 625 ml/ha, T<sub>2</sub>= Fenoxaprop-p-ethyl 9EC at 750 ml/ha, T<sub>3</sub>= Fenoxaprop-p-ethyl 9EC at 875 ml/ha, T<sub>4</sub>= Quizalofop ethyl at 750 ml/ha, T<sub>5</sub>=Two hand weedings (1<sup>st</sup> at herbicide application and 2<sup>nd</sup> at 20-25 DAS and T<sub>6</sub>=Untreated control. Variety TG-37-A was taken during two *Kharif* seasons as test crop. Result revealed that spray of fenoxaprop-p-ethyl 9EC at 875 ml/ha significantly reduced the total number of grassy weed flora and weed dry matter *i.e.* *Echinochloa* spp. in groundnut crop at all the stages of crop growth at 14, 28 and 42 days after treatment over control, two hand weedings, quizalofop ethyl at 750 ml/ha and fenoxaprop-p-ethyl 9EC at 625 ml/ha. The highest yield of groundnut (27.26 q/ha) was obtained in the treatment fenoxaprop-p-ethyl 9EC at 875 ml/ha followed by fenoxaprop-p-ethyl 9EC at 750 ml/ha and quizalofop ethyl at 750 ml/ha. Weeds significantly reduced the vegetative growth attributes measured.

**Key Words :** Groundnut, Fenoxaprop-p-ethyl 9EC, *Echinochloa* spp, Weed flora, Weed dry matter, Yield

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