

RESEARCH PAPER

## Effect of different herbicides on weeds of Kabuli chickpea

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**Abstract :** An experiment was conducted during *Rabi* season of 2010 in the farm of Pulse Research Unit, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola to study the effect of different herbicide on weeds in kabuli chickpea. The Experiment was laid out in randomized block design with eleven treatments replicated thrice. The treatments comprised of weed check (T<sub>1</sub>), weed free (T<sub>2</sub>), hand weeding at 20 and 40 DAS (T<sub>3</sub>), imazethapyr 75g ha<sup>-1</sup> POE 25 DAS (T<sub>4</sub>), imazethapyr 75g ha<sup>-1</sup> POE 35 DAS (T<sub>5</sub>), imazethapyr 100g ha<sup>-1</sup> POE 35 DAS (T<sub>7</sub>), quizalofop ethyl 75g ha<sup>-1</sup> POE 35 DAS (T<sub>9</sub>), quizalofop ethyl 100g ha<sup>-1</sup> POE 25 DAS (T<sub>1</sub>) and quizalofop ethyl 100g ha<sup>-1</sup> POE 35 DAS (T<sub>1</sub>). During the period of experiment weeds *viz.*, *Cynadon dactylon*, *Cyperus rotundus, Commelina benghalensis, Digera arvensis, Celosia argentia, Phyllanthus niruri, Euphorbia hirta, Euphorbia geniculata, Parthenium hysterophorous, Convolvulus arvensis* were dominant weeds observed in chickpea. The treatment weed free followed by two hand weeding at 20 and 40 DAS was most effective in controlling the weeds. This treatment increased the weed control efficiency to maximum extent. Amongst all the herbicidal treatments of weed control, best weed control efficiency was obtain with the treatment, post-emergence application of imazethapyr @ 100g ha<sup>-1</sup>, which is effective against both monocot and dicot weeds. Application of quizalofop ethyl @ 100g ha<sup>-1</sup> was more effective to control monocot weeds. The lowest weed index was observed in two hand weeding treatment at 20 and 40 DAS.

Key Words: Kabuli chickpea, Weed control, Weed free, Hand weeding, Imazethapyr, Quizalofop ethyl

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