Studies on chemical weed control in wheat (*Triticum aestivum*)

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Summary To test the efficacy of different herbicides for controlling weeds in wheat, an experiment was conducted at Malkandher Research Farm, NWFP Agricultural University Peshawar, during Rabi season 2002–03. The experiment was laid out in a randomised complete block design with five replications. The experiment comprised eight herbicide treatments and a weedy control. The herbicidal treatments were the post-emergence application of Rocket 75 WDG (thifensulfuron-methyl) + Tribenuron-methyl (tribenuron-methyl) 75 WDG at 0.027 + 0.027, Rocket 75 WDG (thifensulfuron-methyl) + Tribenuron-methyl (tribenuron-methyl) 75 WDG at 0.037 + 0.037, Rocket 75 WDG (thifensulfuron-methyl) + Isoproturon (isoproturon) 50 WP at 0.046 + 0.741, Tribenuron-methyl 75WDG (tribenuron-methyl) + Isoproturon (isoproturon) 50 WP at 0.046 + 0.741, Aim (chlorfluazuron) 40 WP at 0.296, Logran Extra (triasulfuron + terbutryn) 64 WDG at 0.158, Buctril-M (bromoxynil + MCPA) 40 EC at 0.494 and Affinity (carfentrazone ethyl ester) 50 WDG at 0.016 kg a.i. ha^{-1}.

Ghaznavi-98 variety of wheat was seeded in plots of 6 × 2 m during the third week of October 2002. Data were recorded on weed density after application of herbicides, number of spikes m^{-2}, number of grains $spike^{-1}$ and grain yield (t ha^{-1}). For controlling weeds, Affinity proved to be the best, having only 13.8 weeds m^{-2} as compared with 253.0 weeds m^{-2} in weedy control plots. Similarly, the maximum grain yield (4.6 t ha^{-1}) was recorded in Affinity 50 WDG. It was followed by plots receiving Buctril-M 40EC and Logran Extra 64 WDG with grain yields of 4.2 and 4.0 t ha^{-1}, respectively. Minimum grain yield of 2.8 t ha^{-1} was recorded in the weedy control treatment.