

Abstract

The experiment was conducted to evaluate the efficacy of three non-traditional herbicides in weed control and to determine what effect the chemicals would have on the sprouting of the seeds of selected crops. In the experiment, the main plot, 3m x 3m, consisted of three individual subplots measuring 1m x 1m each. The chemicals, bleach (NaOCl), Dettol antiseptic and Jeyes fluid were used. They were applied at three rates:- 20l ai/ha, 40l ai/ha and 80l ai/ha in the three separate sub plots. The different rates of the chemicals were applied to the three plots on the same day. Plot one was planted out with ten seeds of corn and ten seeds of cowpea immediately after the treatments were applied. Plot 2 was planted out ten days-after the treatment was applied and plot 3 was planted out 21 days after treatment. All the plots were planted out with the same amount of corn and cowpea seeds. There was a water control plot which was used so that the true effectiveness of the chemicals could have been observed because all the results gathered with the chemicals were compared to that of the water control. Weed counts were taken from within a randomly placed 0.25 metre² quadrat at 21 and 31 days after the treatment was applied. Sprouted seeds of the planted crops were counted, starting three days after each planting. At the highest rates of each chemical treatment, the most amount of weed control was observed, but the lowest germination ratio was also seen. Quite interestingly, Dettol antiseptic continued to be effective after 21 days, this was unlike the other two chemicals. Dettol showed selectivity to certain weed species.