ABSTRACT: Weed control constitutes one of the main cost items in carrot production. The current study was conducted at the field station farm, University of Nairobi in 2011 with the aim of developing a cost-effective strategy of managing weeds and increasing the competitive ability of the crop against weeds. The weed control strategies tested in RCBD were replicated three times; black plastic mulch, grass mulch, herbicides (Linuron and oxyfluorfen), mulch / herbicide combinations, foliar feed fertilizer/ one hand weeding combinations, foliar feed fertilizer / 1.5 cm grass mulch combination, hand weeding every two weeks, famers practice (two hand weeding), and control (no weeding). Data on weeds and crop were collected and subjected to analysis of variance (ANOVA), using Genstat (Dicovery edition 3 by VSN international), statistical program. Means were separated using Duncan multiple range tests at P<0.0.5, using Genstart Computer package. Pigweed (*Amaranthus hybridus* L), black jack (*Bidens pilosa* L) and oxalis *(Oxalis latifolia* L) were the most common weeds in the experimental plots. Efficacy of weed control and carrot yields significantly differed. Black polythene achieved (99.2% weed control and 33,984 kg/ha yield; Linuron (78%; 26,544 Kg/ha) and two hand weeding (19%; 14168 kg/ha). It was concluded that mulching is an effective strategy of reducing weed growth in carrots. Foliar feed application imparts competitive ability in the crop against weeds.
***Keywords*:** Herbicide, mulching materials, foliar feed fertilizer, weed control efficiency, yield components