

EFFECT DIFFERENT METHODS OF APPLICATION AND DOSES OF GLYPHOSATE ON CONTROL *Imperata cylindrica* L. GROWN IN NEW POME GRANT ORCHARD.

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ABSTRACT

A field experiment was carried out in Diyala province / Al-Muqaddiyah district during growing season 2011-2012. The aim of present study was to control *Imperata cylindrica* L. grown in pome grant orchard using glyphosate in two application methods, first by knapsack sprayer in rate (1.8kg ai/ h) and the second use rope-wick wiper technique in different rate (1 L herbicide diluted with water from 1- 6 L). The experiment was set out as factorial design in randomized complete block design with three replicates. The results showed superiority T2(1:1)(herbicide: water) in killing degree up 6.24 ,and T2(1:1 herbicide : water) and T3 (1:2 herbicide : water) gave less average in percentage of regrowth caused and go we 8.16,7.87 respectively Time periods 60 and 90 day after control high killing degree up 5.02 , 5.03 and reduce percentage of regrowth up to 6.45 ,6.68 respectively .Moreover the efficacy of glyphosate in weed continue until 360 day after application . as well caused significant effect in reducing height *Imperata cylindrica* L. the T5(1:4 herbicide : water) gave less height 74.33cm. and T2,T4,T5 gave reduction in dry weight 127.00,125.67and 129.67 gm/m², respectively. T4 gave less dry weight of rhizomes 141.33 gm/m², and with wipe technique get good and satisfactory result specially T2(1:1 herbicide : water) which gave 68.11 % control compared with T8 (1.8kg ai/ h) as application spray 49.62%.

Key words: *Imperata cylindrica* L , Glyphosate ,Chemical control , Herbicides methods application .

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