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

A.H.A . AL-Wagga*

*Dept. of Field crop- College of Agric.- Univ. of Diyala - Republic of Iraq-adnan alwakaa2003@yahoo.com

ABSTRACT

A field experiment was carried out in Diyala province / Al-Muqdadiya district during growing season 2011-2012. The aim of present study was to control Imperata cylindrical L. grown in pomes grant orchard using glyphosate in two application methods, first by knapsack spryer 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: 1herbicide: 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 .

Diyala Agricultural Sciences Journal, 7 (1):230-242. (2015). ISRA impact factor 4.758.

http://www.agriculmag.uodiyala.edu.iq

http://www.iasi.net/iasi?func=issueTOC&isId=4427&uiLanguage=en

Received for publication March 12, 2014. Accepted for publication Sept. 11, 2014.