



## **RESPONSE OF SEED GERMINATION OF SUGAR BEET HERBICIDES** CHLORIDAZON AND CYCLOATE IN VITRO

Zahra Dastvarjan1\*, Reza Sadrabadi Haghighi2, Majid Abbaspoor3 1- Mashhad Branch, Islamic Azad University, Mashhad, Iran 2- Agronomy and Plant Breeding Department, Mashhad Branch, Islamic Azad University, Mashhad, Iran 3- Agriculture and Natural Research Center, Mashhad, Iran

\*Corresponding Author Email: zahradastvarjan@yahoo.com

## ABSTRACT

In order to predict the response of Cycloate and Chloridazon on germination of sugar beet seeds, a lab research was carried out in Seed Technology Laboratory, Mashhad Branch, Islamic Azad University in 2013. This research was done in two separate experiments in a completely randomized design with 14 treatments and three replications. Treatments consisted of Cycloate at doses of 0, 18.175, 36.35, 72.7, 145.4, 290.8 and 581.6 g a. i./ha and Chloridazon at doses of 0, 37.5, 75, 150, 300, 600 and 800 g a. i./ha. The results showed that the seed germination percentage sensitivity of sugar beet at different doses of Cycloate were more than Chloridazon. So that the effective dose Cycloate and Chloridazon to reduce germination of 50% compared to control ( $ED_{50}$ ) were 46/2912 and 96/4463 g a.i. /ha respectively.

Keywords: Chloridazon, Cycloate, Dose-response, ED<sub>50</sub>, Sugar beet