Non-Chemical Integrated Weed Management to Control Brome chess (Bromus danthoniae Trin) according to the time of cutting and application of Flamethrower as well as

Hooman Beyrami¹, Somayeh Giti², Mohammad Raoofi³

1-Student of Weed science, Department of Plant Eco Physiology, University of Tabriz, Tabriz, Iran
2-Weed Science Researcher. Member of Young Researchers and Elite club, Islamic Azad University, Iran.
3-Department of Agronomy and Plant Breeding, Faculty of Agriculture and Natural Resources, University of Mohaghegh Ardabili; Ardabil, Iran.
*Corresponding Author: hoomanbayramov@gmail.com

Abstract

Alfalfa as a forage crop constitutes the largest area of planting in the world as Iran and it plays an important role in feeding livestock due to its high protein content. One of the challenges of alfalfa production is the presence of weeds. Alfalfa are particularly susceptible to weed competition because they are not vigorous competitors and weeds emerging shortly after seeding can reduce alfalfa success. Weeds interfere with alfalfa during establishment, reducing dry matter yields and plant persistence by competing for light, water, and nutrients. The most damage by weeds in an alfalfa field occurs in the first harvest, however, weeds in many areas, including Hamadan, damage all harvests. A research was conducted in perennial alfalfa to study the effects of time of cutting in first cut and Flamethrower application in non-chemical management to control of weed Brome chess (Bromus danthoniae Trin) and its effects on another cutting in perennial alfalfa (Medicago sativa) and alfalfa’s hay as well as. This study was implemented in the randomized complete block design in Amzajerd village alfalfa farms (Located seven kms from Hamedan-Tehran road) during the summer and autumn 2012-2013. Eight treatments in four replications were considered. Treatments were included: Flamethrower application before first cutting and time of cutting 20%, 30%, 40 of flowering of alfalfa and integrated of methods as well as. After 20%, 30%, 40% of flowering of first cutting of alfalfa and 50% of flowering in another cutting in each cutting, selection of sample was performed by quadrat area in 50x50 cm and quality and quantity were measured for weed and alfalfa that include: Density and dry weight. All of treatments were effective on weed management. Flamethrower application was very influencing on weed control.

Key Word: Alfalfa, Weeds, Cutting, Flamethrower