

Technical Bulletin

Effectiveness of TOUGH 5EC on Common Lambsquarters Control in Chickpeas - University of Idaho 2020

Overview

A study was conducted in 2020 by Joan Campbell at University of Idaho to evaluate the efficiency of TOUGH® 5EC (pyridate) applied postemergence in chickpeas to Common Lambsquarters (LQ). Prior to the EPA registration of TOUGH 5EC in September 2020, broadleaf weed control was dependent on preemergence herbicides.

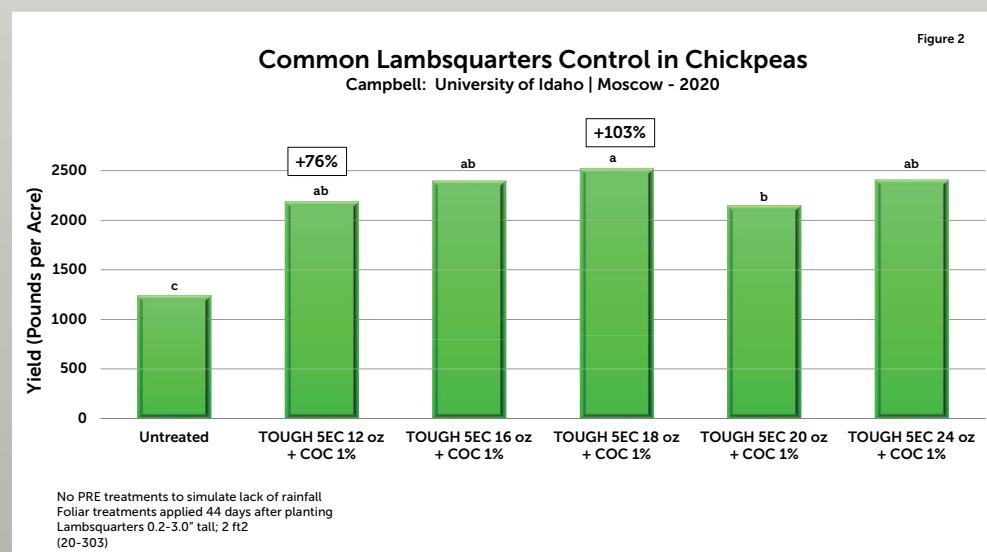
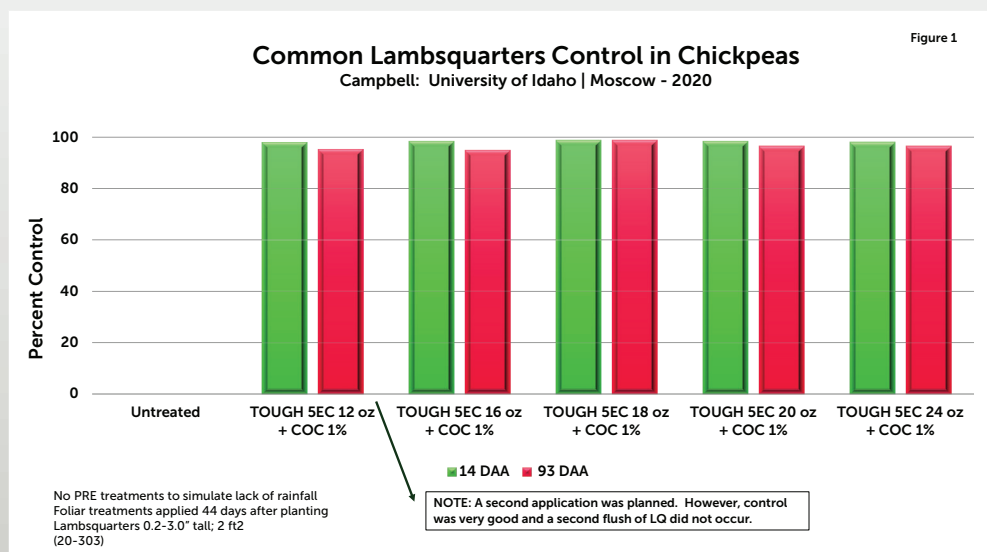
Methods

Chickpeas were NOT treated with a pre-emergent herbicide in order to simulate lack of rainfall which is required to activate pre-emergent treatments. Grasses were controlled in all plots with clethodim and a fungicide application was made to all plots as well, in accordance with commercial production. Treatments were applied 44 days after planting, with a 1% COC. At time of treatments, LQ was 3" tall or less, a timely application for TOUGH 5EC.

Results

At 14 days after application, the lowest rate, 12 oz per acre, of TOUGH 5EC resulted in 98% control of LQ. (See Fig. 1), and a 76% (948 lb per acre) increase in yield. At the 18 oz rate, control increased to 99% with a yield increase of 103% (1284 lb per acre) (See Fig. 2).

In addition, plots treated with TOUGH 5EC did not require a pre-harvest desiccant herbicide, such as glyphosate or paraquat (due to weeds).



This study reveals that TOUGH 5EC, is an effective herbicide for post emergence broadleaf weed control in chickpeas offering control of Common Lambsquarters and resulting in increased yield.