Marco Peña
Associate in Extension – Weeds and Agronomy
Arizona Cooperative Extension
University of Arizona

6 April 2022

Herbicide Evaluations in Transplanted Lettuce

As we are all aware the most commonly used herbicides in lettuce production are Kerb (Pronamide), Balan (Benefin), and Prefar (Bensulide). Our weed complex for lettuce grown in the low desert includes summer annual weeds grasses and broadleaves early in the season as well as winter annuals, which are a problem during the cooler months. Most of these are controlled with preemergent herbicides although escapes are common and must be controlled postemergence. Occasionally when herbicides and cultural practices are not sufficient expensive hand weeding is required for commercially acceptable weed control. To illustrate numbers from our 2016 Crop losses report showed that 91% of the lettuce surveyed required some hand hoeing even when 82% of the acres was treated with Pronamide. Also Bensulide and Benefin were applied at lower percent.

Therefore, evaluation of new effective herbicides is always welcomed. We conducted a couple of projects at the Yuma Agricultural Center to look at weed management in transplanted lettuce to determine Pre and Post-Transplant weed control as well as crop safety of other active ingredients such as S-metholachlor (Dual Magnum), Pendimethalin (Prowl), DCPA (Dacthal) and compare them with Pronamide (Kerb) and other products.

Transplanting lettuce and the use of planting tape has opened the possibility of using herbicides that injure direct seeded lettuce but may be safer to plants with a developed root system. Additionally, they could show more efficacy in controlling some weeds present in our area.

We are still collecting results from these trials and will published them soon in this Newsletter as well as in upcoming meetings.