

## **Lettuce Weed Management Update.** B.Tickes,University of Arizona

### **Summary**

The same five herbicides have been used on head and leaf lettuce for more than 40 years. How these herbicides are used, however, has been adapted to changes in irrigation techniques, lettuce types and precision planting. Furrow irrigation is still utilized although sprinkler irrigation during crop establishment has replaced much of this. Planting techniques and equipment have become increasingly precise and there has been a gradual shift from head lettuce to leaf lettuce.

In 2017 the USDA reported that 55% of the lettuce grown in Arizona and California was treated with Pronamide, 11% with Bensulide and 11% with Benefin. Pronamide had commonly been applied preplant on bedtops and incorporated with furrow irrigation. It was found that sprinkler irrigation was leaching the herbicide below the germinating weeds. In response, much of the Pronamide is now chemigated 2 to 7 days after sprinklers have been turned on. Split applications of Pronamide, 3 to 7 days apart, is also gaining popularity.

Bensulide has also been used on lettuce for many years. It was commonly applied after planting and before irrigation on the bed top. It has been found that Bensulide works best when incorporated with high volumes of sprinkler water and much of it is now chemigated after planting.

Benefin has always been used in combination with either Pronamide or Bensulide. Although it is recommended that it be applied prior to bed formation and mechanically incorporated, many users have found that incorporation into listed bed tops is more effective. This has become a common practice although crop injury is more common.