

## **Kochia Warrants our Full Attention**

### **Abstract:**

Kochia has been a very competitive weed in the Northern Plains for decades. However, farmers' ability to control kochia has become even more difficult since kochia has developed resistance to some of our commonly used herbicides. In recent years, we have observed that some kochia populations are no longer completely controlled by glyphosate, fluroxypyr, and dicamba. In December 2022, some kochia populations were documented to be resistant to Group 14 PPO herbicides such as saflufenacil and carfentrazone. PPO resistance will leave no-till farmers with few preplant burndown options. There is also evidence that these kochia populations may be resistant to other extremely important soil-applied PPO herbicides like sulfentrazone and flumioxazin. Kochia will need to be managed through cultural practices in addition to using other herbicide modes of action. A genetic test using just kochia leaves is being developed to facilitate rapid identification of PPO-resistant kochia.