

Survey of Bearded Sprangletop Response to Clomazone in California Rice.

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Bearded sprangletop (*Leptochloa fusca* (L.) Kunth ssp. *fasicularis* (Lam.) N. Snow) is a problematic weed in California rice production, however few herbicides provide control. As control of bearded sprangletop has declined, suspicion of resistance has increased due to the continuous rice cropping system. Seed from 21 populations were submitted by growers from the California rice growing region and screened for clomazone resistance at a field rate of 0.6 lb. ai ac⁻¹ (673 g ai ha⁻¹) and a 3X field rate of 1.8 lb. ai ac⁻¹ (2019 g ai ha⁻¹). Four populations were confirmed resistant at both rates tested. However, the survival of the treated plants resulted in reduction of biomass ranging from 30 to 98% at 3 WAT. A decrease in height ranging from 29 to 72% was observed for all populations that survived the 3X treatment. Clomazone resistant bearded sprangletop plants were initially injured but began to recover 14 DAT. Additional studies are being conducted to test the level and mechanism of resistance.