

AIM, a new herbicide to enhance glyphosate activity on difficult to control weeds.

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In late October 2005, a newly registered herbicide product manufactured by FMC Corporation and marketed as AIM (carfentrazone-ethyl), was applied to determine the ability of AIM to enhance glyphosate activity on difficult to control weeds. The primary weed of concern in this study was tropical dayflower, *Commelina benghalensis*. The trial was conducted as a randomized complete block design with 4 replications using 5 tree plots. All treatments were applied with a standard herbicide boom sprayer using a spray volume of 20 gallons per treated acre and traveling at 3.25 miles per hour. Roundup Weather Max (glyphosate) was applied at 44 or 66 ounces of product with and without AIM at 1 or 2 ounces per treated acre. LI700 (surfactant) and Choice (ammonium sulfate) were applied with all mixtures at a rate of 1 quart per 100 gallons. In addition to the Roundup and AIM treatments, Roundup Weather Max (44 oz/A) was mixed with Landmaster (glyphosate + 2,4-D) (64 oz/A) for comparison.

AIM significantly improved the control of tropical dayflower when mixed with the 44 ounce rate of Roundup Weather Max at both the 1 and 2 ounce rate. The 2 ounce rate of AIM provided higher numerical ratings when mixed with either the 44 or 66 ounce rate of Roundup Weather Max as compared to the 1 ounce rate. The application of Roundup Weather Max combined with Landmaster was comparable to the 66 ounce rate of Roundup Weather Max and those treatments which included AIM at either 1 or 2 ounces per treated acre.