

THE EFFECT OF CGA-362622 ON GRAMINICIDE EFFICACY

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Abstract

Experiments were conducted at the Plant Science Research Center, Starkville, MS, to evaluate johnsongrass control with tank mixtures and sequential applications of 2.15 g ai/A CGA-362622 with 0.069 lbs ai/A Assure (quizalofop-P), 0.188 lbs ai/A Fusilade (fluazifop-P), and 0.125 lbs ai/A Select (clethodim). Treatments were arranged as a two factor factorial in a randomized complete block design. Factor A consisted of application timings of CGA-362622 7, 3, and 1 day before and after application of each graminicide. At day 0 (when the graminicide was applied) CGA-362622 was also tankmixed with each graminicide. Additionally, each graminicide was applied alone for comparison with the sequential and tankmixture applications. Factor B consisted of graminicides, all of which were applied at day 0 to minimize differences in control due to johnsongrass size.

Johnsongrass control 28 days after treatment (DAT), with all graminicides, was reduced (14 - 54%) when tankmixed with CGA 362622. Tank mixtures with Select resulted in 54% antagonism 28 DAT, which was greater than with any other graminicide. Johnsongrass control was reduced more when CGA-362622 was applied 1 or 3 days prior to Assure or Fusilade than when applied 1 or 3 days after. Johnsongrass control was generally affected the same by CGA-362622 applied before or after applications of Select. Based upon these preliminary data it would appear that CGA-362622 should not be tankmixed with a graminicide. It also appears that less antagonism occurs when the graminicide is applied first than when applied sequentially with CGA-362622. Overall it would appear that at least a 3 day interval should be allowed following graminicide application before application of CGA-362622. If CGA-362622 is applied first then at least a 7 day interval before application of graminicides is needed to reduce chances of antagonism.