CONTROL OF VOLUNTEER ENLISTTM CORN USING HERBICIDES APPLIED PREEMERGENCE

Fellipe Goulart Machado[1], Vanessa Vital Silva[2], Willian Daroz Matte[3], Lucas Matheus Padovese[4], Rubem Silvério de Oliveira Jr.[5], Jamil Constantin[6], Felipe Ridolfo Lucio[7]

Universidade Estadual de Maringá - UEM/NAPD[1], Universidade Estadual de Maringá - UEM/NAPD[2], Universidade Estadual de Maringá - UEM/NAPD[3], Universidade Estadual de Maringá - UEM/NAPD[4], Universidade Estadual de Maringá - UEM/NAPD[5], Universidade Estadual de Maringá - UEM/NAPD[6], Dow Agrosciences[7]

Enlist™ corn exhibits tolerance to glyphosate, glufosinate, 2,4-D and haloxyfop. In view of the imminent launch of this technology in Brazil, it is necessary to investigate and develop alternatives to control volunteer plants of Enlist™ corn. The objective of this work was to evaluate the effect of herbicides applied preemergence for the control of volunteer Enlist™ corn. The experiment was conducted in a randomized complete block design with ten treatments. The herbicide treatments evaluated with the respective doses in g a.i. ha^{-1} were: T1 – clomazone (1600), T2 – metribuzin (480), T3 – chlorimuron (25), T4 – imazethapyr (100), T5 – sulfentrazone (300), T6 - [sulfometuron+chlorimuron] (4 + 16), T7 – diclosulam (35), T8 – fomesafen (500), T9 - [imazapic+imazapyr] (17,5 + 52,5) e T10 – check without herbicide. The Enlist™ volunteer corn was sown at three dates (0, 10 and 20 days after herbicide application - DAA) at three cm depth. Evaluations included visual % control at 10, 20 and 30 days after sowing (DAS), corn stand and chlorophyll index (SPAD). For all three sowing sates (0, 10 and 20 DAA) treatments T6 and T7 presented control rates above 85% in all evaluations. T8 was similar to the previously mentioned treatments at sowing dates of 0 and 10 DAA. The residual effect of treatments T6, T7 and T8 presented the best results with higher percentages of control and significative reductions in chlorophyll contents and plant stand for the different sowing dates of Enlist^{TM} volunteer corn.

Palavras-chave: volunteer plants, preemergence, fomesafen, sulfometuron, diclosulam