

## WHAT ARE THE HERBICIDE OPTIONS TO EMERGED PLANTS OF VOLUNTEER ENLIST™ CORN?

Fellipe Goulart Machado<sup>1</sup>, Vanessa Vital Silva<sup>2</sup>, Willian Daróz Matte<sup>3</sup>, Jonas Rodrigo Henckes<sup>4</sup>, Rubem Silvério de Oliveira Jr.<sup>5</sup>, Jamil Constantin<sup>6</sup>, Felipe Ridolfo Lucio<sup>7</sup>

Universidade Estadual de Maringá - UEM/NAPD<sup>1</sup>, Universidade Estadual de Maringá - UEM/NAPD<sup>2</sup>, Universidade Estadual de Maringá - UEM/NAPD<sup>3</sup>, Universidade Estadual de Maringá - UEM/NAPD<sup>4</sup>, Universidade Estadual de Maringá - UEM/NAPD<sup>5</sup>, Universidade Estadual de Maringá - UEM/NAPD<sup>6</sup>, Dow Agrosience<sup>7</sup>

To evaluate the possibility of using herbicides applied in postemergence aiming the control of Enlist™ volunteer corn (tolerant to glyphosate, glufosinate, 2,4-D and haloxyfop), an experiment was carried out in a randomized complete block design with 15 treatments. Treatments evaluated were: fluazifop-p-butyl, haloxyfop-p-methyl, clethodim, sethoxydim, tepraloxym, clodinafop, pinoxaden, imazethapyr, carfentrazone, lactofen, paraquat, [paraquat + diuron], quinclorac, saflufenacil and check (no herbicide). Applications were carried out at three stages of Enlist™ volunteer corn (V2, V5 and V7). For plants that received herbicides at V2 stage, [paraquat + diuron], clethodim, tepraloxym and imazethapyr provided the highest levels of control (90 - 99%) at 21 days after application (DAA). For plants at V2 and V5 stages, the application of [paraquat + diuron] provided better control in relation to the remaining herbicides at 7 DAA. For the subsequent evaluations (14 and 21 DAA) treatments with clethodim and tepraloxym provided the highest average control, however, results were similar to [paraquat + diuron]. For applications at V7 stage, only the treatments tepraloxym, clethodim and [paraquat + diuron] provided control  $\geq 78\%$  at 21 DAA (78, 84 and 99%, respectively). Control varies with corn phenological stage, and reduced efficiency is observed with later applications. The results of plant height were similar to visual control. Control options for Enlist™ volunteer corn are still scarce, but the best results in postemergence applications is found by applying ACCase inhibitors (DIN's) and [paraquat + diuron].

**Palavras-chave:** postemergence, imazethapyr, clethodim, tepraloxym, [paraquat + diuron]