

**SELECTIVITY OF REKLEMEL<sup>™</sup> (Fluazaindolizine) TO** *Thichoderma harzianum* **UNDER LABORATORY CONDITIONS.** Seletividade do Reklemel<sup>™</sup> (Fluazaindolizine) ao *Thichoderma harzianum* em condições de laboratório. <u>Ferezin, D. F. P.<sup>1</sup></u>; Ferreira, A.<sup>1</sup>; Oriani, E. E.<sup>1</sup>; Pacheco, D. R.<sup>1</sup>; Ribeiro, L. B. R.<sup>1</sup>. <sup>1</sup>Corteva Agriscience do Brasil Ltda. Email: danilo.ferezin@corteva.com

The integration of chemical and biological tools in the phytosanitary management of different crops reinforces the sustainability of the production system, however this practice is only possible when the selectivity levels of these products are known. Reklemel<sup>TM</sup> is a new chemical nematicide, effective in controlling phytonematodes and its selectivity to Trichoderma harzianum was tested in this study. The trial was conducted at Corteva in Mogi Mirim/SP in CRD and 6 replicates, each Petri dish being a replicate. Eleven treatments were tested: Untreated; Reklemel<sup>™</sup> (Fluazaindolizine) at 5, 50, 250 and 1000 ppm; Fluensulfone and Fluopyram at 5 and 50 ppm; Cadusaphos and Bacillus licheniformis + Bacillus subtilis at 50 ppm. The highest concentrations of the treatments were added in PDA medium, and after that, serial dilutions were made to obtain the concentrations of the other treatments. Subsequently, with the medium still liquid, 10 mL/plate was poured. After solidification, discs of mycelium of the fungus were inoculated in the center of each plate. Mycelial growth was evaluated at the time of contact between the edges of the colony and the edge of the control plate (3 days after inoculation). The diameter ( $\emptyset$ ) of the colony was measured in two directions, determining the average Ø, finally, the Percentage of Growth Reduction (PGR) was calculated, being: PRC=100-[(Average Ø Treatments\*100)/mean Ø Witness]. The results were submitted to ANOVA and 5% Tukey. The selectivity shown by the different treatments are in the order of most to least selective: Fluensulfone and Reklemel<sup>TM</sup> at 5 ppm (<2% g); Reklemel<sup>™</sup> and Fluensulfone 10 ppm and Cadusaphos 50 ppm (<20% f); Fluopyram at 5 ppm (33% e); Reklemel<sup>TM</sup> at 250 ppm (55% d); B. licheniformis + B. subtilis at 50 ppm (67%) c); Reklemel<sup>™</sup> at 1000 ppm (78% b). Fluopyram at 50 ppm (90% a) had the highest PGR. It is concluded that Reklemel<sup>TM</sup> is a selective product for *T. harzianum* at field doses, which has an estimated concentration in the soil between 5-10 ppm.