

Evaluation of the indaziflam herbicide on the roots of sugarcane crop

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Indaziflam acts by inhibiting the cellulose biosynthesis of the plant growth meristem, including the roots, fact that may occur, since it has long persistence in the soil and with rainfall can be leached to contact with them. Researches prove the indaziflam selectivity, when the objective of the evaluations is parameters of the epigeal part of the sugarcane (*Saccharum sp.*), however, works diagnosing its action on the roots, are scarce. Thus, a field experiment was carried out to evaluate the hypothesis of indaziflam selectivity on sugarcane roots planted on 12/16/2014. Plots: 3 lines spaced by 1,5 with 6 meters in length. Treatments: sequential applications, indaziflam on the respective dates/concentration (g ai.ha^{-1}): 1) 12/16/14 (93,5), 03/19/15 (45,0) and 10/16/15 (93,5); 2) 12/16/14 (45,0), 03/09/15 (93,5) and 10/16/15 (93,5) and 3) weeded control with 6 replicates. On 09/15/2016 - 336 days after the last treatment, the Indaziflam still persisted in the soil and trenches were opened, 1x1 m, and for expose and characterize the evaluated roots in number and percentage in the upper (0-50 cm) and lower (50-100) portions. The results were submitted to analysis of variance and test of means. Considering the whole table, it was determined that the number of roots in treatment 2 was significantly higher than the treatment weeded control, and treatment 3, whereas in the upper portion of the soil, the number of roots of indaziflam treatments, regardless of the dose, were higher and different from the weed free. It's concluded that indaziflam is selective for sugarcane.

Palavras-chave: *Saccharum sp.*, methodology, selectivity

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