

## Evaluation of underdose of indaziflam on the initial development of eucalyptus seedlings

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Indaziflam is indicated for eucalyptus culture (*Eucalyptus Urophylla*), in the implantation of this is used deep subsoiling for the transplant of the seedlings, and later of directed application of herbicide between the rows of crop, as a function of this it's possible to carry the rainwater with underdoses from the indaziflam to the roots. This herbicide acts on inhibition of cellulose biosynthesis of the growth meristms, including those located in the roots. In the present study, we evaluated the hypothesis of indaziflam underdoses to effect the initial development of eucalyptus seedlings, in two types of trials: 1) Closed System – Vessels without percolation (experimental unit), completely randomized design, four replicates, treatments: 0, 5; 10; 20; 26,6 and 40  $\mu\text{ga.i.ha}^{-1}$ , evaluations: fresh weight (epigeal and roots) and dry (epigeal) at 56 days after application of treatment (DAT); 2) Open System: field experiment, transplants of indaziflam seedlings after 396 DAT: 50, 100, 200  $\text{ga.i.ha}^{-1}$  and weeded control. Evaluations performed until 115 days after transplant: height, diameter, number (apical meristems, branches), leaf area and epigeal weight (fresh and dry). During the test period, soil samples were systematically collected, proving that indaziflam persisted. The results were submitted to analysis of variance, test of means and regressions. In the epigeal part, values were significantly higher in the treatment with indaziflam than the treatment weeded control in parameters: height, weight (fresh and dry), leaf area, number of branches and meristems. Thus, it proved selectivity of indaziflam and possible effect of hormesis on development of eucalyptus seedlings.

**Palavras-chave:** Hormesis, methodology, forestry

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