

BROKEN-STICK MODEL TO DETERMINE THE FINAL PERIOD OF POSSIBLE COMPANIONSHIP BETWEEN WEEDS AND SOYBEAN

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Productivity data got in two experiments were used with the objective of evaluating statistical methods to determine the final period of possible companionship between weeds and soybean. The field experiments were delineated using the randomized block design. The crop was kept weed-free for increasing initial periods. Through Duncan's Test and Tukey's Test ($p = 0,05$), the final period began in 20 days, to both experiments. However, in quantitative series of treatment, the utilization of regression is very much useful and statistically indicated. Using the broken-stick regression model, the final period began in 21 days in exp. 01 [$Y = 1962.04 : 19.01 (X-21 - | X-21|)$; $R^2 = 0.70$ ***], and 41 days in exp. 02 [$Y = 2397.45 + 11.84 (X-41 | X-41|)$; $R^2 = 0.72$ ***]. Therefore, broken-stick model is able to supply important informations to weed management.