



III INTERNATIONAL SYMPOSIUM ON GENETICS AND PLANT BREEDING

OVERCOMING ABIOTIC AND BIOTIC STRESS CONSTRAINTS IN PLANT SCIENCE

ONLINE

EVALUATION OF THE EFFECT OF BIOSTIMULANTS ON THE INITIAL DEVELOPMENT OF SOYBEAN VARIETIES, USING MULTIVARIATE ANALYSIS METHOD

III Simpósio Internacional de Atualização em Genética e Melhoramento de Plantas, 0ª edição, de 24/05/2021 a 26/05/2021
ISBN dos Anais: 000

CABRAL; Luiz Guilherme Ramalho ¹, MINGORANCI; Vitória Costa ², FABRINO; Franco Monici ³, CARDUCI; Ana Júlia ⁴, LIMA; Ronaldo Cintra ⁵, TOMAZ; Rafael Simões ⁶

RESUMO

The culture of soybeans (*Glycine max*) has grown in the agronomic sector due to the high utilization of its grains, stimulating the development of technologies aimed at increasing its productivity. In this sense, this work sought to investigate the effect of bioactivators and performance of different soybean varieties. Thus, an experiment was conducted in greenhouse using pots, during April and May 2020 at FCAT UNESP - Câmpus de Dracena. The cultivars Agroeste 3730, KWS 6719, Intellicrops 1332 and DM 66i68 were used and the bioactivators Initiate Soy, Nortox Raiz, and a control treatment were evaluated. Seeds were treated with *Bradyrhizobium japonicum* inoculant and sown in 4.5 L pots with dystrophic red argissolo with sandy texture. An entirely randomized design with three repetitions was used, in a double factorial scheme 4x3, considering the varieties and the bioactivator. The experimental unit was formed by a pot with a final population of three plants evaluated at 29 DAS. The following characteristics were analyzed: root length, aboveground length, total fresh mass, total dry mass, root fresh mass, root dry mass, aboveground fresh mass, and aboveground dry mass. In bioactivators, ANOVAs revealed interaction effect in most traits. Multivariate principal component analysis allowed investigating the effect of product use considering the traits simultaneously. In general, the DM variety excelled, independent of the treatments evaluated. The varieties showed different responses in relation to the treatments tested.

PALAVRAS-CHAVE: Bioestimulante, soja, variedade

¹ Department of Plant Production, FCAT - College of Agricultural Sciences and Technology UNESP Dracena., luiz.ramalho-cabral@unesp.br
² Department of Plant Production, FCAT - College of Agricultural Sciences and Technology UNESP Dracena., vitoria.c.mingoranci@unesp.br
³ Department of Plant Production, FCAT - College of Agricultural Sciences and Technology UNESP Dracena., franco.fabrino@unesp.br
⁴ Department of Plant Production, FCAT - College of Agricultural Sciences and Technology UNESP Dracena., ana.carduci@unesp.br
⁵ Department of Plant Production, FCAT - College of Agricultural Sciences and Technology UNESP Dracena., ronaldo.c.lima@unesp.br
⁶ Department of Plant Production, FCAT - College of Agricultural Sciences and Technology UNESP Dracena., rafael.tomaz@unesp.br