APPLICATION OF HUMITEC AND PRODUCTION OF SUGARS BY FOUR SUGAR CANE VARIETIES

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Summary

The humic substances have direct effect on the absorption of nutrients and metabolism of plants, consequently influencing growth, physiology and productivity of the culture. The purpose of the present study was to analyze the effect of the application of a product containing humic substances (Humitec), over the photosinthetically active foliar area, quality of the broth and production of sugars, by four varieties of high productive potential sugar cane. The study was conducted at Triunfo Mill, located in Boca da Mata – Alagoas and, consisted in the application or not of Humitec, in four sugar cane varieties: RB867515, RB92579, SP813250 and VAT90212. The experimental outline was random blocks with five repetitions. The soil from the experimental area was analyzed and received application of calcareous and agricultural gypsum. Humitec, at 20 liters per hectare dosage, was applied over the sugarcane thole, during planting. At the phase of maximum culture growth, the photosinthetically active area was determined and, on sugar cane maturation, analyzed the production of stems, the quality of the broth and the production of sugars. For the foliar area there was significant effect only for variety. The rate of foliar area from RB867515 and SP813250 was 4.3 and, RB92579 and VAT90212, 16% higher, reached 5.0. The apparent sucrose content in broth ("PCC") was 15% and there was no influence of varieties and application of Humitec. On the other hand, the production of manufacturable stems ("TCH") and of apparent sucrose ("TPH") were significantly (P<0.01) influenced by the application of Humitec, with an 8% average increase verified, once the TCH and TPH increased, respectively, from 122 and 18.3 to 131 and 19.8 t/ha. Then, the application of Humitec is a technology for the increase of productivity and profitability at the sugar cane culture.

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