

# II INTERNATIONAL SYMPOSIUM ON SCIENCE AND BIOTECHNOLOGY ENTREPRENEURSHIP AND INNOVATION

## PHYSICOCHEMICAL OF STRAWBERRY PSEUDOFRUITS OF APPLIED ZINC OXIDE NANOPARTICLES APPLICATIONS PROPERTIES

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### Abstract

Strawberry cultivation is appreciated in many countries because it has well-defined nutritional and attractive sensory characteristics. This work proposes the application of nanotechnology to the improvement of physico-chemical characteristics in the strawberry crop, with the main objective of analyzing the influence of different treatment doses of fruits with zinc oxide nanoparticles on nutritional performance. The physicochemical analyzes of the pseudofruits from strawberry cultivars of the San Andreas species were carried out at the Chemistry Laboratories, from November 2015 to June 2016 (3x5), factor A (fertilizer: recommended dose of Zn, 50% of the recommended dose in the form of nanoparticles of Zn and 100% of the recommended dose) was used in a randomized complete block design (DBC) In the form of nanoparticles of Zn) and factor B, 2nd Period; 3rd Period; 4th Period and 5th Period, with 7 repetitions. The data collected were subjected to analysis of variance by the F test and the differences between means were compared by the Tukey test ( $P \leq 0,05$ ). The process of treatment of strawberry culture with zinc oxide nanoparticles is efficient for anthocyanin and soluble solids nutrients. The nanoparticles of 100% of the recommended dose demonstrate to be more effective as the zinc oxide in its natural form, to increase the values of soluble solids.

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