

Title: EFFECT OF SEED MICROBIOLIZATION WITH NATIVE IN THE INITIAL DEVELOPMENT OF THE AERIAL PART, NUMBER OF LEAVES AND PLANT HEIGHT IN ONION

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Abstract:

The onion (*Allium cepa*) is a widely cultivated species and appreciated throughout the world. The state of Santa Catarina is renowned for being the biggest national producer with about 32%. Microorganisms can promote the development of plants by establishing beneficial relations in its root system. The Native is a commercial product containing *Trichoderma harzianum*, *T. viride*, *Trichoderma* sp., *Rosea clonostachys*, *Bacillus subtilis* and *Paenibacillus lentimorbus* in its formulation. Aiming to evaluate the effect of microbiolization of onion seeds with Native® suspension in the initial development of shoot of onion seedlings, an experiment was conducted at the Instituto Federal Catarinense -. IFC / Campus Rio do Sul. In a completely randomized design with four replications constituting 10 plants each, onion seeds of Bola Precoce were microbiolized for 24 hours in suspension containing Native 1 and 2% and control treatment immersed in saline solution (0.85% NaCl). After microbiolization, the seeds were placed in trays containing non-sterile commercial substrate and wrapped in plastic greenhouse at 25 ° C (± 2 ° C). After a period of 30 days was conducted the assessment of the number of leaves, plant height and fresh and dry mass of the aerial part. The results showed no statistically significant difference between the parameters evaluated. It was not observed an increase in the number and height of leaves with the use of biological formulated. It was noted that Native 2% treatment had a gain of 30.1% compared to treatment Native 1% in weight of the fresh mass. In the aerial part dry mass the treatment Native 1% was lower than the control treatment. A bigger increase in aerial part of seedlings is an important factor in the development, providing more photosynthetic area and consequently a better production of onion. Therefore, it is necessary to develop new researches that aiming evaluate the effectiveness of biological formulated along the crop cycle.

Keywords: *Allium cepa*, biological formulated, aerial part.