MORPHOAGRONOMIC DEVELOMENT OF TOMATO SEEDLINGS IN ORGANIC SUBSTRATE

DESENVOLVIMENTO MORFOAGRONÔMICO DE MUDAS DE TOMATE EM SUBSTRATO ORGÂNICO

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Abstract

The concern with the waste generated by economic activities has been mobilizing several segments in relation to its disposal and the environmental impacts generated. In this context, the use of some agricultural residues is an alternative that aims to generate profit and reduce costs for producers, in addition to reducing the impacts generated on the environment through conservationist agricultural practices, generating better quality of life. The present work evaluated the morphoagronomic development of tomato seedlings (cultivar Coração de Boi) as a function of the substrate, formed by chicken manure and corn husks with 6 months of curing, from the agroecology sector of the Instituto Federal do Espírito Santo, and the commercial substrate Maxfertil®. The soil was classified as Latosol and the treatments were: 100% soil (T1), 50% chicken manure + corn husk and 50% soil (T2), 100% chicken manure and corn husk (T3) and 100% Maxfertil® substrate (T4). Sowing was done in a Styrofoam tray with 200 cells. At 25 days after sowing, the morphological traits were evaluated in 8 central seedlings collected per treatment:: number of leaves, plant height, length of the largest root, length of the aerial part, diameter of the stem and fresh shoot and root mass, shoot and root dry mass. The Dickson Quality Index (DIQ) ranged from 5.37 to 26.87. The data obtained were organized by Excel 2017. The Kruskal-Wallis test was used to form possible groups of similar treatments for each variable. We found that chicken manure and corn husk, when pure or mixed with the soil, can be considered efficient and cheap alternatives for the production of tomato seedlings.

Keywords

Agroecology, Organic waste, *Solanum lycopersicum*.

Acknowledgments

The authors thank the Federal Institute of Espírito Santo for providing facilities and equipment available for the study; the Office to Coordinate Improvement of Higher Education Personnel (CAPES) and the National Council for Scientific and Technological Development (CNPq) for financial support and scholarships for master's, doctoral and PIBIC scholarships.