EVALUATION OF THE INITIAL DEVELOPMENT OF EUCALYPTUS SP. SEEDLINGS PRODUCED IN BGC COMPARED TO SEEDLINGS PRODUCED IN CONVENTIONAL POLYPROPYLENE TUBES

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MINGORANCI; Vitória Costa [1], FABRINO; Franco Monici [2], NEVES; Ana Júlia Carduci [3], RIBEIRO; Arthur Lopes [4], BARRETTO; Vitor Corrêa de Mattos [5], TOMAZ; Rafael Simões [6]

RESUMO

Socio-environmental issues have been going emphasis for the improvement of sustainability, which has stimulated new practices to minimize the impasses of sustainable development. In Brazil, the largest area of planted trees corresponds to *Eucalyptus* plantations, given the economic specie's relevance. The use of technological innovations such as BGC (biodegradable tubes) has the potential to considerably reduce the reverse logistics related to the use of conventional seedling tubes, because BGC is planted with the seedling. This work aimed to conduct a comparative analysis of the initial development of *Eucalyptus* seedlings produced in polypropylene tubes and BGC together with different doses of phosphorus. An complete randomized design, with four repetitions, was used in a double factorial scheme, considering the type of tube and four doses of phosphorus. The experiment was conducted in a greenhouse at the experimental area of UNESP-Dracena Campus. The soil used is classified as red yellow argissolo dystrophic with sandy texture. It used seedlings grown in conventional tubes and BGC, and planted with this, being a single plant per pot. The evaluated traits were diameter the seedling neck and height of the aerial part of the plant. Both traitsshowed significance, the Tukey test was performed and the growth curve was fitted to the treatments evaluated at the times after planting by means of non-linear models and Artificial Neural Networks. There was no significant difference between seedlings planted with BGC compared to conventional, showing in fact that it can replace the polypropylene tube, with the differentials of being lighter, compostable, besides reducing the reverse logistics and operation costs. The use of this technology will allow us to rethink the use of containers from non-renewable sources, seeking a sustainable balance that provides a reduction in the direct and indirect environmental impact caused by the conventional system.

PALAVRAS-CHAVE: Eucalyptus sp, conventional tube, biodegradable

[1] São Paulo State University (Unesp), College of Agricultural and Technological Sciences, Dracena, vitoria.c.mingoranci@unesp.br
[2] São Paulo State University (Unesp), College of Agricultural and Technological Sciences, Dracena, franco.fabrino@unesp.br
[3] São Paulo State University (Unesp), College of Agricultural and Technological Sciences, Dracena, ana.carduci@unesp.br
[4] São Paulo State University (Unesp), College of Agricultural and Technological Sciences, Dracena, arthur.l.ribeiro@unesp.br
[5] São Paulo State University (Unesp), College of Agricultural and Technological Sciences, Dracena, vitor.barretto@unesp.br
[6] São Paulo State University (Unesp), College of Agricultural and Technological Sciences, Dracena, rafael.tomaz@unesp.br