

Nanofiber technology as support to plant and root development: Results from tomato pot experiments

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Nanofibres technology can be an interesting aid to deliver biostimulating substances such as polyphenols or conjugated biofilms of growth-promoting bacteria. However, the response of plants has not yet been studied in depth. In this work, we focused on the effects of some nanofibrous multilayer tissues on *Solanum Lycopersicum* L. At first, we tested germination and seed growth in vitro, then we focused on the physiological response and roots morphology short pot experiments. The roots are the section of the plant that showed a significant response to the application of the nanofibres, which was also confirmed by analyzing the microbial activity on the rhizosphere. The results suggest an interesting development of the technology with further developments in application fields where it is necessary to act directly on the plant's root system.