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Effect of AMF, Selenobacteria and Nano Zinc Oxide on Morphological and Nutritional Traits of Strawberry

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ABSTRACT

This study explores the interactions among bio inoculants and zinc nano-fertilizer and their combined effects on strawberry growth and yield metrics in an effort to improve agricultural methods. The present investigation was carried out, with the objective to assess the impact of nano zinc, the viability of co-inoculating AMF and selenobacteria, as well as their potential interactions on morphological and nutritional traits of strawberry. Combinations arranged in a randomized complete block design comprising two levels of AM fungi and three levels of selenobacteria and nano zinc oxide each. The interaction of AM fungi × selenobacteria × nano zinc oxide application reveals that maximum height of plants (25.31 cm) and maximum number of runners per plant (36.75) were recorded in the interaction, where plants were rhizoinoculated with AM fungi, selenobacterial strain *Stenotrophomonas maltophilia* and foliar application of nano zinc oxide @ 200 ppm. Whereas, increase in the number of leaves with corresponding enhanced leaf area were produced in the interaction, AM fungi, selenobacterial strain *Stenotrophomonas maltophilia* and foliar application of nano zinc oxide @ 100ppm) alongwith maximum leaf phosphorus (0.46 %) and manganese content (46.28%).

Keywords: AMF, Selenobacteria, Nano Zinc, Leaf Nutrition and Strawberry

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