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Effect of Rhizobacterium on Growth, Yield and Quality of Strawberry

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Abstract: The present investigation was carried out to study the co-inoculation effect of effective rhizospheric bacteria on growth, yield and quality of strawberry cv. Chandler during the year 2017-18. The strawberry plants were treated with rhizospheric bacteria i.e. *Pseudomonas* strains namely, CP109 and CPS67 and *Bacillus* strains namely HCA61, RCA3 and SYB101, whereas untreated soil served as control. The growth, yield and quality of fruits were significantly influenced by rhizospheric bacteria. Among different treatment, treatment T_4 (CP109 + HCA61) recorded the significantly highest fruit yield per plant (257.92 g). The growth parameters, *viz*. plant height (14.11 cm), number of leaves per plant (12.34), crown diameter (13.21 mm), fresh weight (45.89 g) and dry weight(13.11 g) of plant maximum in treatment combination CP109+ HCA61,whereas the bacterial inoculations did not affect plant spread, fruit weight, fruit size and moisture content % in strawberry. However, with respect to TSS (%), Ascorbic acid and anthocyanin content (mg 100 g^{-1}) of fruits *Bacillus* HCA61+ *Pseudomonas* CP109 was found best. The co-inoculation with *Bacillus* and *Pseudomonas* strains could be an ecofriendly and cost effective technology for improving the growth, yield and quality of strawberry.

Keywords: *Bacillus, Pseudomonas,* strawberry, growth