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Growth and Yield of Substrate-Cultured Strawberry as Affected by Root Zone Volume and Fertigation Frequency

Yuichi Yoshida¹, Yasuhisa Hirose, Yukari Morimoto and Tanjuro Goto

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y Effects of root-zone volume and fertigation frequency on 4 cultivars of substrate-grown strawberry (*Fragaria × ananassa* Duch., 'Nyoho', 'Asukarubi', 'Akihime' and 'Tochiotome') were investigated. Fertigation frequency had no significant effect on growth and yield of strawberry even in the minimum root-zone volume of 0.6L/plant. Total yield, mean berry weight, and root dry weight at end of harvest decreased with decrease in volume, but no significant difference was observed in number of harvested berries and subsequent growth of runners and daughter plants. In the yield and root growth, there were large differences between peat bags (2.25 L/plant) and bowl-shaped containers (0.6-1.5L/plant), and highly significant non-linear regressions between the two parameters and the root-zone volume. The differences may be caused by factors other than the volume, such as the shape of root-zone and edge of containers or drain property, and so on.

Key words : *Fragaria × ananassa*, root, runner, solar radiation, water absorption







