



## Canopy Microclimate and Reproductive Behavior of 'L-49' Guava Plants at Different Spacings

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**Abstract :** The study on 'canopy microclimate and reproductive behaviour of guava plants at different spacing' was intended to see the changes in canopy microclimate with planting density and its effect on flowering & fruiting behaviour in 'L-49' guava plants. The present investigations revealed that with increase in plant spacing from 6x2m to 6x4m, the interception of radiation was increased significantly during both rainy and winter crop seasons. Similarly, with increase in spacing between plants, the mean canopy temperature was increased while the relative humidity was decreased. The flower bud density during both crop seasons was maximum in plants at widest spacing of 6x5m and least in plants at 6x2m spacing. Similarly, the average fruit setting was also higher at wider and least in closely spaced plants. Mean number of fruits per plant, yield per plant and fruiting density was recorded higher in plants at widest spacing of 6x5m and least in plants at 6x2m spacing. The plant spacing of 6x2m and 6x3m was not encouraging owing to lesser distribution of solar radiations and sub-optimal canopy microclimatic conditions. The plant spacing of 6x5m and 6x4m was found to be better due to maximum absorption of solar radiation and optimum microclimate in the orchard leading to be advantageous for better flowering, fruit set and retention.

**Key Words:** Canopy microclimate, Flowering and fruiting, Guava, Plant spacing

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