

Abstract:

In 'Bombai' lychee, harvest maturity of fruits are altered by pre-harvest application of GA3 (100 mg.L⁻¹), ethrel (0.25 ml.L⁻¹), NAA (50 mg.L⁻¹) and kinetin (25 mg.L⁻¹). Application of GA3 and kinetin at aril development stage delayed fruit ripening by about four days while ethrel spray advanced the fruit ripening as depicted in the anthocyanin content of harvested fruits when compared to control. In addition to delay in fruit harvesting, GA3 and kinetin improved fruit weight and proportion of pulp to fruit weight at different stages of fruit harvest compared to other plant growth regulators. Although fruit ripening was advanced by about four days with ethrel, the fruit weight was lesser when compared to control. NAA sprayed fruit also ripened more or less at par with control. Ethrel application also caused early improvement of fruit colour associated with early increase in the TSS:acid ratio compared to control while delayed development of fruit colour was noted with GA3 and kinetin due to presence of higher chlorophyll content in the peel.