

Title Delaying the ripening of 'BOMBAI' litchi
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Abstract

The litchi industry in West Bengal, India is based on the cultivar 'Bombai'. The harvest season last for only 15-20 days in the month of May. During peak harvest, the price slashed markedly and due to inadequate postharvest infrastructure a sizable quantity of litchi gets wasted. The aim of this study was to test several methods to delay 'Bombai' fruit maturation and ripening, in order to extend the harvest period in the orchard.

We investigated two shading treatments (30% and 50%). In addition, spraying with GA₃ (50, 100 and 200mg l⁻¹) and KNO₃ (4%) at different stages (on 1 cm panicle, at 15, 21 and 28 days after anthesis) were also evaluated. The results revealed that spraying GA₃ at 50mg l⁻¹ at 15 or 21 days after fruit set or shading the trees using agronet (30 and 50 % litchi transmission) at 30 days before expected harvesting delayed the harvesting by about 5-8 days. Two spraying of potassium nitrate (KNO₃) at 4% after 15days of fruit set caused the maximum fruit weight of 25.80g. The quality of fruit (in terms of TSS/acid ratio) was recorded best when KNO₃ at 4% was sprayed once at 21 days after fruit set.