

# *Aloe vera* based dipping treatments on shelf life and physico-chemical properties of litchi during ambient storage

Arghya Mani, A. B. Sharangi and P. K. Sahu

Proceedings of the National Academy of Sciences, India Section B: Biological Sciences 91: 521–532. (2021)

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## Abstract

Litchi exhibits very limited postharvest life due to rapid softening and decay in spite of being a non-climacteric fruit. After the 3<sup>rd</sup> day onwards the fruit shows cracking and browning of skin. Litchi fruits after harvesting were dipped with *Aloe vera* and different safe products like chitosan, corn starch calcium chloride and salicylic acid. A treatment of *Aloe vera* 50% + Chitosan 2% was able to reduce the PLW of litchi fruits up to eighth day of storage, exhibited minimum shrinkage of the fruits, minimum change in total sugar content and titratable acidity of the fruits during 8th day of storage. *Aloe vera* 50% + Chitosan 1% successfully reduced the rate of increase in TSS of the fruits even up to 8<sup>th</sup> day of storage. Least change in vitamin C content during storage was observed in *Aloe vera* 50% + Chitosan 1% followed by *Aloe vera* 50% + Chitosan 2%. The same treatment reduced the incidence of fruit cracking, skin browning and decay percentage. No drastic change in organoleptic property was observed during the storage period. Hence the treatment of litchi with *Aloe vera* and chitosan can enhance non-refrigerated storage life of litchi up to 8 days.