

USE OF NATURAL PRODUCTS ON POSTHARVEST DECAY AND QUALITY OF BANANA FRUIT

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Extended Summary

In recent years due to adulterants and use of agrochemicals in fruits, peoples including children suffer from different diseases. Banana, being a climacteric fruit has a very short storage life. To avoid the use of synthetic fungicides, some alternative and efficient methods for the control of these diseases are required. A research has been conducted to test the inhibitory effects of the essential oils of *Aloe vera* against postharvest diseases of banana and to evaluate the physio-chemical changes and quality of banana treated and untreated with *Aloe vera* gel. Freshly harvested mature green banana were collected from commercial field of Belanagar upzilla of Narsingdi district. Bananas were selected for research based on uniform size, shape color and absence of external injuries. Fresh leaves of *Aloe vera* were obtained from Kawran bazar and gel was prepared in the laboratory. Different treatments, such as T₁ = control, T₂ = packaging with unperforated white coloured polythene, without *Aloe vera* gel, T₃ = packaging with perforated white coloured polythene, without *Aloe vera* gel, T₄ = packaging without polythene, with only *Aloe vera* gel, T₅ = packaging with *Aloe vera* gel with unperforated white coloured polythene, T₆ = packaging with *Aloe vera* gel with perforated white coloured polythene were used. Among all treatments, fruits packaging with *Aloe vera* gel and perforated white coloured polythene is the best for postharvest quality of banana. To avoid the use of toxic chemicals and health hazard issues, it is recommended to use natural products for the quality of banana during postharvest period.

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