

# Using Cannabidiol as a potential postharvest treatment to maintain quality and extend the shelf life of strawberries

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## Abstract

Cannabis has been used in ancient medicine to treat a wide array of medical issues. Specifically, Cannabidiol (CBD), a non-psychoactive component of cannabis, has been linked to containing antimicrobial properties. However, research surrounding the potential use of CBD as an antimicrobial agent is still preliminary. This study aims to examine the potential of CBD oil as a postharvest treatment used by consumers at home to reduce microbial growth and extend the shelf life of strawberries. CBD oil was applied to fresh fruit after harvest followed by storage at 1 °C for 8 days and 10 °C for to 8 days. Strawberries were evaluated for visual quality and microbial load before and during storage. Results from this study showed that CBD oil was effective at maintaining the visual appearance of strawberries, above the minimum threshold of a visual rating score of 3, compared to the fruit that was not treated. It was also found that CBD oil was effective at reducing the microbial load on treated strawberries compared to fruit that was not treated. This research shows that CBD oil has the potential to be used by consumers at home as an effective antimicrobial treatment and to extend strawberry shelf life.