

Title Control of *Aspergillus flavus* with essential oil and solvents extract of *Carica papaya* L. seeds
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Abstract

The essential oil and 95% ethanol extract of *Carica papaya* L. seeds were tested for antifungal activity against *Aspergillus flavus* in vitro on potato dextrose agar (PDA) for 7 days at room temperature (28±2 °C). The essential oil (500-10,000 ppm) and 95% ethanol extract (10,000 ppm) showed the highest activity against mycelia growth. The essential oil at 500 ppm and 95% ethanol extract at 10,000 ppm were applied to sweet corn seeds and they were then kept in polypropylene bags at room temperature for 14 days. Germination, germination index and free fatty acid contents on the tested seeds were not affected. The decay on treated seeds caused by the storage fungi was also delayed. This study showed that the essential oil of papaya seeds exhibits a strong antifungal activity against *A. flavus*. It is useful for control of this storage fungus and serves as a potential source of sustainable eco-friendly botanical fungicides.