

ABSTRACT

Growth of fruits which form an important part of human diet has been jeopardized by the many fungal diseases that are present today. This study was conceived to isolate the most common fungal pathogens in passion fruits. Fungi were isolated using potato dextrose agar in addition to characterization using morphological, cultural, and biochemical means. Extraction of essential oils from rosemary (*Rosmarinus officinalis*) and eucalyptus (*Eucalyptus agglomerata*) was done. Before carrying the sensitivity test of essential oils to the fungal isolates, constituents of the essential oils were determined. The most common fungal pathogens isolated from passion fruits were *Alternaria* spp. (45%), *Fusarium* spp. (22%), *Colletotrichum* spp. (17%), and *Penicillium* spp. (16%). There was a relationship between heating time and yield of essential oils in rosemary ($r = 0.99$) and eucalyptus ($r = 0.99$). Conversely, there was no significant difference in the amount of essential oils produced by rosemary and eucalyptus ($P = 0.08$). Furthermore, there was a significant difference in growth inhibition of the fungal pathogens between essential oils from rosemary and eucalyptus ($P = 0.000438$). Fungal pathogens isolated from passion fruits can be controlled using essential oils from rosemary and eucalyptus. The oils need to be produced in large scale.