

## **Determination of antifungal activity of *A. vera* leaf powder extracts against banana pseudostem rot fungi, *Marasmiellus* spp.**

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Being an important medicinal plant, *Aloe vera* is important in industrial perspective as well as traditional usage. The antifungal activity of *A. vera* leaf powder extracts was assessed against banana pseudostem rot fungi, *Marasmiellus* spp. Leaf powder with acetone and ethanol extracts of 20, 200, 400, 1000 and 2000  $\mu$ l were administered to assess the inhibition of colony growth of *Marasmiellus* spp. The experiment was conducted using completely randomized design. By using *A. vera* acetone extract, in first day after inoculation, inhibition percentage was higher (74.53%) in 2000  $\mu$ l and the lowest percentage (23.53%) of inhibition was obtained in 20  $\mu$ l of extract. All treatments were significantly differed each other. The same highest and lowest percentage of inhibition was obtained in second, third and fourth day after inoculation also. In *A. vera* ethanol extract, the highest (100%) inhibition was observed in 1000  $\mu$ l and 2000  $\mu$ l extracts. The lowest inhibition was recorded (2.26%) in 20  $\mu$ l of *A. vera* ethanol extract. There was no significant difference between 1000 and 2000  $\mu$ l extracts. Among the 1000 and 2000  $\mu$ l leaf extracts, ethanol extract had highest inhibition percentage than *A. vera* acetone extract. These findings are useful to prepare the extracts of *A. vera* leaf powder for the management of *Marasmiellus* spp.

**Keywords:** *Aloe vera*, Antifungal activity, Banana pseudostem rot, Colony inhibition, *Marasmiellus* spp.