



## In Vitro Studies on Antifungal Activity of Aqueous Extract of *Amorphophallus campanulatus* against *Fusarium oxysporum* f. sp. *cubense*

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### Keywords

*Fusarium oxysporum* f. sp. *cubense*, *Amorphophallus campanulatus*, Aqueous Yam Extract; Antifungal Activity.

**ABSTRACT:** Banana is an important commercial crop cultivated in several parts of India. However, its cultivation and economic benefits are severely curtailed by a wilt disease caused by the soil borne pathogen *Fusarium oxysporum* f. sp. *cubense* (Foc). Foc is a fungal plant pathogen that causes Panama disease of banana (*Musa* spp) also known as fusarium wilt of banana. Foc is believed to be one of more than 100 formae speciales (special forms) of the soil borne *Fusarium oxysporum*. The pathogen enters young plants through feeder roots and causes wilting of plants ultimately leading to death of plants. Once infected, the pathogen spreads rapidly from infected individual plants to other non infected plants. The present study stresses upon antifungal effect of the aqueous extract of yam (*Amorphophallus campanulatus*) against *Fusarium oxysporum* f.sp. *cubense* causing Panama Wilt of Banana. Yam is traditionally used as an intercrop and in crop rotation with banana cultivation which considerably reduces the infection in the subsequent banana crops. Though this has been observed since decades but no investigation has been done to understand the reason for such biological control of the pathogen. The current study reveals that the aqueous extract of yam tuber considerably inhibits the growth of the pathogen in vitro.  $10^{-5}$  dilution of aqueous yam extract was found to be more effective in controlling the pathogen. © 2016 iGlobal Research and Publishing Foundation. All rights reserved.

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