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Cellulase Production & Identification of *Fusarium oxysporum* Isolate from Papaya Fruit

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ABSTRACT: Present deals with the study of extracellular cellulase activity of some haploid filamentous fungi. Fungi (*Fusarium oxysporum*) was isolated from the papaya fruit to obtain the strains with potential to produce the hydrolytic enzyme and slide culture technique was used for the microscopic and macroscopic examination of fungi (*Fusarium oxysporum*) on sabouraud agar media. Slide culture technique preserves the morphological features relatively undistributed compared with tease mounts and cello- tape mount. In slide cultures, we have grown the fungi directly on the slide on a thin film of sabouraud agar media. Thus, there is no need to remove a portion of the fungus from a culture plate and can transfer it directly to the slide, and then inoculate a very small portion of fungus colony and incubate at 25° C for 3 days. Characterization and identification of *Fusarium oxysporum* were done by on the basis of morphology and various biochemical tests. Lactophenol cotton blue was used to the imagination of fungi. Solid state fermentation was used for the production of cellulase using various chemicals like sodium nitrate, potassium phosphate, magnesium sulphate, potassium chloride, carboxymethyl cellulose, peptone and agar. Flood the plates with congo red solution and destained with NaCl observe the plates for the formation of a clear zone around the growth which confirms the presence of cellulase. © 2014 iGlobal Research and Publishing Foundation. All rights reserved.

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