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**Fungal Xylanase production by using agricultural
and industrial wastes**

By

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Abstract

The experiments were conducted to obtain xylanase enzyme from the two fungi strains *Aspergillus niger* strain *AUMC 14230* by using corn cob as main component in fermentation media. The experiments were carried out in the laboratory of Soil, Water and Environmental Instituted, Giza Egypt. To achieve this target the following procedures will adopted: Several agricultural wastes especially corn cob were used as a raw material to isolate microorganisms with capabilities to decompose the raw material cellulose. The isolated microorganisms were purified and screened for the cellulose degradation and for the production of the xylanase enzyme. Fungal strain was selected that showed strong cellulose degradation and high xylanase enzyme production. The fungal strain was identified to species level. Nutritional and environmental condition for the xylanase enzyme production by the fungal strain was optimized. The xylanase enzyme was precipitated and purified.

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