عنوان مقاله:

Investigation Aromatic Compound of industrial wastewater by a Aquatic Fungus

محل انتشار:

سومین همایش مدیریت پساب و پسماند در صنایع نفت و انرژی (سال: 1391)

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خلاصه مقاله:

The metabolism of α-naphthol by Aspergillus niger, a coelomycete isolated in Ardebil, Iran, from industrial wastewater, was studied. Aspergillus niger metabolized approximately 80% of α-naphthol within 5 days. The identification and quantification of degradation products using gas chromatography–mass spectrometry (GC-MS) demonstrated that approximately 41% of the parent compound was converted into 1-ethyl-2-methyl benzene, 7.43% was converted into acetonaphthone, 5.55% was transformed into 4-hydroxy-1-naphthyl sulfate, 3% into 1,4-naphthoquinone, and about 6.68% into 2-phenyl-1,2,3-tetrahydro-1-naphthol. These results support a role for A. niger in affecting the .environmental fat of pollutants in ecosystems

کلمات کلیدی:

Biotransformation, Bioconversion, Aspergillus niger, α-naphthol, Fungi