



Biodiesel production by oleaginous fungi before and after exposing of U.V. light

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Abstract: The current study was highlighted the use of oleaginous fungi isolated from different Iraqi ecosystems (polluted water and soil)as raw material for production of myco-diesel or biodiesel which can be used as alternative to fossil fuels , many countries are currently trying to find sources for this type of diesel in preparation for the post- petroleum phase because it is low costand eco-friendly .Oleaginous fungal isolates grown on liquid natural medium date syrup and it is possible to use as a substrate for cultivating of oleaginous fungal isolates , the results showed good biomass of the dry weight was the highest value 10.22 g / L and the highest yield of lipids was 5.35 g / L to *A.terreus* on date syrup medium . Fatty Acid Methyl Esters FAMES compositions were mainly composed of long chain saturated and unsaturated fatty acids, decanoic, tridecanoic, pentadecanoic, hexadecanoic acid in high amounts that reached 34% . , then Octadecenoicacids 15% and 11-, Octadecenoic acids 10% and few amounts of decanoicandtridecanoic .The oleaginous fungal test *A.terreus* was tested for its ability to increase lipid accumulation intracellular cells before and after exposing of U.V. light , the results revealed increasing of exposing of U.V light for 5 min. and 10 min. of spore suspension of *A.terreus* before cultivating on liquid medium.

Keywords:Oleaginous fungi – mycodiesel –U.V mutagenesis –date syrub.

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