Biofuel from Tree Fungus

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The endophytic tree fungus, Gliocladium Roseum from the Ulmo tree, expels hydrocarbons which could be used as fuel. The purpose of this project is to identify the fungus, Gliocladium Roseum, grow and harvest the fungus and analyze for the hydrocarbons present in the substance produced by the fungus. Gliocladium Roseum is also found on rotten wine grapes. In the present work, we also aim to exploit this fungus for biodiesel production, by the fractional distillation. We have evaluated the process for production of biodiesel by growing and harvesting the fungus from Oatmeal agar. We used oatmeal-salt agar because of its constituents, for our evaluation. Using graphs-line graphs from the tables and also comparing the boiling points of pure substances with the isolates for Data Analysis. This showed that, although quite some work still has to be done, Gliocladium Roseum (from the rotten grapes and also, Ulmo tree) have the potential to be tomorrow's source of biodiesel. In conclusion it is possible to produce high quality biodiesel that runs engines longer than diesel from the Gliocladium Roseum.

Awards Won: