

# Beneficial Microbes: Food, Pharma, Aqua & Beverages Industry

August 25-27, 2015 Valencia, Spain

## Searching usability of waste material of rose oil for microbial oil production

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The world is fighting against global warming and searching alternatives on increased energy needs is accelerating. Bio-fuels; biodiesel, biogas and bio-ethanol has created new opportunities in countries with high agricultural potentials. Today, importance of biodiesel that is a kind of bio-fuels is increasing. Vegetable oils that are obtained such as rapeseed (canola), sunflower, soybean, safflower and fats react with short chain alcohol (methanol or ethanol). The product of this reaction that is used as the fuel is called Biodiesel. Microbial oils may be used as a oil such as waste oil or vegetable oil. Studies have shown that biodiesel produced from microbial oil. A small number of microorganisms may accumulate lipids as storage materials. Therefore, only some yeast, fungi and microalgae have property for accumulate lipids. The microorganisms with this feature are called as 'fatty microorganisms'. Yeasts are used in this study and rose have chosen for yeast development and reproduction. Because our country is in the first place in the world for production of rose. Roses are produced close to 6000 tons per year in Turkey. Processing of rose flower, high incidence of rose pulps occur as a result of the process. As well as this material is useful in both biodiesel steps and yeast process. It is also because of waste pulp rose causes environmental pollution and bad smell, this project have found an environmentalists solution to prevent adverse environmental conditions and using the waste material will be contributing to the national economy.

### Biography

I am Ayşe GOKDAL and was born in Ankara, Turkey in 1990. My bachelor department is Biology at Eskişehir Osmangazi University. Now, I am a master student in biotechnology at Anadolu University since 2012. Biotechnology is multidisciplinary science, so it prevents many experiences in different science fields like molecular biology, microbiology, chemistry and bioengineering etc.. Searching usability of waste material of rose oil for microbial oil production is my thesis subject. In the future, I think that this fieldwork can be a step to develop new energy sources.

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