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Accumulation trend of dispersed petroleum products in filter feeder organism: (*Mytilus galloprovincialis* L., 1819)

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Petroleum hydrocarbons in aquatic environments have different origin such as biogenic, natural and anthropogenic. The amount of oil in the sea may vary from small amount and continuous spill to large amounts and sudden spill. According to the spill amount, ecological and biological interaction and reaction of the environment may change from catastrophic sudden damage to the chronic, long lasting damage. The first contact of petroleum to organisms start from outside of the body then move through inside of the body. During this biochemical process of the petroleum products could be sometimes end up with cell damage and cell death. The effects of the petroleum products, dispersant and dispersed oil were very harmful for living organisms. In the present study, the ecological effects of spilled fuel oil and dispersed-fuel oil on mussels were studied under the laboratory condition for the showing adhesive effect of the dispersed diesel oil. Accumulation differences among diesel oil and dispersed-diesel oil of mussels were investigated in the laboratory conditions with three repetitive experimental design. Mussels were exposed with diesel oil and dispersed-diesel oil for 5 days. As a result, dispersed-diesel oil were more suitable for accumulation by mussel than diesel only. The stability of the dispersed diesel oil in the aquarium were more longer than diesel oil itself.

Biography

Fatma Telli Karakoc is a scientist at Karadeniz Technical University Marine Sciences Faculty. Her main research interests are marine pollution and ecotoxicology. She received her PhD on "carcinogenic effects of polycyclic aromatic hydrocarbons on fishes and changes their physiological responses". After that, she has concentrated on illegal discharges from ships and marine pollution based on petroleum hydrocarbons and emergency response for the accidental spills

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