



## Crude oil removal via isolated cyanobacteria in presence of linear alkyl benzene sulfonates

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### ABSTRACT

This study was carried out to evaluate the ability of two cyanobacterial isolates, *Anabaena flose-aquae* and *Westiellopsis prolifica*, to degrade Iraqi crude oil in batch cultures with the addition of linear alkyl benzene sulfonate. The degree of oil removal was measured after a 15-d culture period. According to biomass and gas-chromatography data, axenic cultures of both strains were able to degrade crude oil, showing complete removal of some hydrocarbon compounds during the 15-d exposure period. The strains produced biosurfactants at a final concentration of 2–3.1 g/L, which was further evidence of their oil-degrading capabilities.

*Keywords:* Oil removal; Crude oil; Cyanobacteria; Biodegradation; Batch culture

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