The Influence of Crude Oil on Growth of Freshwater Algae

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Abstract : The effects of Iraqi crude oil on growth of three freshwater algae (Chlorella vulgaris Beij., Scenedesmus acuminatus (Lag.) Chodat. and Oscillatoria princeps Vauch.) were investigated, basing on it's biomass expressed as Chl.a. Growth rate and doubling time of the cell were calculated. Results showed that growth rate and species survival varied with concentrations of crude oil and species type. Chlorella vulgaris and Scenedesmus acuminatus were more sensitive in culture containing crude oil as compared with Oscillatoria princeps cultures. The growth of green algae were significantly inhibited in culture containing (5 mg/l) crude oil, while the growth of Oscillatoria princeps reduced in culture containing (10 mg/l) crude oil.

Keywords : algae, crude oil, green algae, Cyanobacteria

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