



Effect of pesticide Glyphosate on some biochemical features in cyanophyta algae *Oscillatoria limnetica*

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Abstract : The blue green alga *Oscillatoria limnetica* was isolated from lotic ecosystem. The isolated microalga species was cultivated in BG-11 media for biomass production and to test the effect of organophosphorus glyphosate on carbohydrate, total protein, shikimic acid, flavonoid and superoxide dismutase enzyme.

Adversely depleting of the cellular activities of *O. limnetica* causing by glyphosate treatments, leading to a marked decrease in the carbohydrates, proteins, flavonoid and maximum reduction was 30.980mg/l, 22.39mg/l and 0.48 µg/g dry wt., respectively at 20mg/l of glyphosate. The shikimic acid pathway was inhibited by glyphosate, leading to an accumulation of shikimic acid. The shikimic acid content increased and the highest content was 1.38mg/l at 20mg/l. Also, superoxide dismutase enzyme activity increased along with increasing glyphosate concentrations and maximum activity was 3.14 units/ml in 20mg/l.

Keywords: pesticide ,glyphosate ,cyanophytae ,*Oscillatoria limnetica*, total protein ,shikimic acid ,SOD, flavonoid.

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