

The freshwater green alga, *Selenastrum capricornutum*, was used to examine the toxicity of hydroxylamine intermediates of trinitrotoluene (TNT) and dinitrotoluenes (DNTs) formed during microbial transformation. Three intermediates of TNT, 2,4-DNT, and 2,6-DNT, along with the parent compounds, were used. The compound structures are tabulated. Results showed that all three intermediates of TNT were significantly less toxic than TNT, but the dihydroxylamino intermediate was as toxic as TNT at higher concentrations. For 2,4-DNT, significant differences in algal toxicity were noted only for 4-hydroxylamino-2-nitrotoluene and 2,4-diaminotoluene at 1.4 mg/l and 2-amino-4-nitrotoluene at 14 mg/l. For 2,6-DNT, 2-amino-6-nitrotoluene and 2-hydroxylamino-6-nitrotoluene exhibited significantly lower and higher toxicity, respectively, than the parent compound.