EFFECT OF DIAZINON AND G-LYPHOSATE <PESTICIDES) ON OXYGEN CONSUMPTION OF THE BOX MUSSEL *SEPT/FER BILOCULARIS* L.

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ABSTRACT

Oxygen consumption of box mussel *Septif'er bilocularis* L. W.17-0.18 g d.w.) was monitored for one hour during exposure to diazinon and glyphosate pesticides. Depletion of dissolved oxygen was also monitored at 10 min intervals for 2 h. There were no significant differences (p>0.05) between the control and the treatments at low concentrations. At concentrations of 0.6, 6, and 30 ppm diazinon, the oxygen consumption rates were [mean± standard error (SBm 193.46 38.84, 239.77 ± 40.36, and 208.05 ± 38.57 ml O_2 h^{-1} g^{-1} respectively. In sublethal concentrations of 480, 720, and 960 ppm glyphosate, the rates were 195.26 43.06, 252.28 36.06, 225.43±22.40 ml O_2 h^{-1} g^{-1} respectively (157.27 ± 34.10 ml O_2 in the control). Concentrations of 6 and 30 ppm diazinon, and 720 and 960 ppm glyphosate were required to show a statistically significant (p<0.05l effect on the oxygen consumption. In low concentrations, both pesticides tended to increase oxygen consumption of the but oxygen consumption decreased if the concentrations increased.