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EFFECT OF DIFFERENT LEVELS OF ORGANOCARBAMATE INSECTICIDE (SEVIN 85 SP) ON FOUR LOCAL FISH SPECIES OF NORTHERN BANGLADESH

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ABSTRACT

To investigate the effect of organocarbamate insecticide (Sevin 85 SP) on four local freshwater fish species the experiment was conducted at Agricultural Chemistry Laboratory, Mohammad Danesh Science and Technology University, Dinajpur during April to September 2016. Results showed that the limit of probit was increased with the increment of insecticide concentration and advancement of time for all fish species. The lethal concentration (LC₅₀) of Sevin 85 SP was 30.76 ppm, 29.33 ppm, 25.91 ppm and 23.88 ppm in Anabas testudineus, Heteropneustes fossilis, Batasio tengana and Channa punctatus, respectively. The results indicate that the Sevin 85 SP was more toxic to Channa punctatus while less toxic to Anabas testudineus as compared to other two fish species. Qualitative characters of water such as pH, temperature, electrical conductivity and total dissolved solids of the experimental water media were increased but the dissolved oxygen of that was reduced with the increment of insecticide concentration and exposure of time which also negatively affected the fish behaviours. Finally, it can be concluded that the treated fish species can be more affected by the recommended dose of Sevin 85 SP applied in the field as in this lower dose applied in the experiment they were seriously injured.



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