ABSTRACT

The main focus of this study is to determine the effect of the ethanolic crude extract of *Ipomoea aquatica*, one of the most commonly used vegetables in the Philippines due to its nutritional and phytochemical properties, on the embryonic development of *Danio rerio* embryos. Embryos on their thirty percent epiboly up to its seventy-two hour post fertilization were treated with three different concentrations of the ethanolic crude extract of *I. aquatica*: T1 (4.1 g/L); T2 (5.2 g/L) and T3 (6.5 g/L). The control group which exhibited normal rate of development served as the basis in determining the malformations exhibited by the embryos. Results from the conducted experiment revealed that there is no significant difference in the rate of development of embryos exposed to 4.1 g/L, 5.2 g/L and 6.5 g/L concentration of the ethanolic crude extract of *Ipomoea aquatica*. Moreover, normal development of the organs such as the eyes, fins and tail was also observed on the embryos when treated with 4.1 g/L, 5.2 g/L and 6.5 g/L of *I. aquatica* ethanolic crude extract. Thus, all the concentrations exhibited no malformation effect on the treated embryos.

Keywords: Epiboly, Malformation, Embryo, Fertilization, Concentrations

