EFFECT OF ^{60}CO GAMMA RADIATION ON *Biomphalaria glabrata* (Say, 1818) EMBRYOS

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Organisms are exposed to ionizing radiation action by natural or artificial sources. Ionizing radiation may induce several injuries in organisms as neoplasia and embryonic malformations. Freshwater snails are suitable organisms for the radioembryology experiment because of the short reproduction period and their well known morphological and embryological aspects. *Biomphalaria glabrata* is the host intermediate of schistosomiasis. Egg-masses were obtained from a population of *B. glabrata* reared in the laboratory for several years. They are maintained in aquaria with filtered water, and fed ad libitum with lettuce. The embryonic stages of trochophore, early veliger and veliger, were irradiated with 20 and 25 Gy of ^{60}Co gamma radiation (Atomic Energy of Canada LTD, Gammacell-220 - IPEN/SP, 378 Gy/h). Quantitative analysis of the radiation-induced alterations were the dead, malformed and unhatched embryos. Observations were performed by the aid of the stereomicroscope (SZ-STS/Olympus, Japan). Percentage of malformations obtained in trochophore (25 Gy) was 36.2, early veliger with 4.2, veliger (20 Gy) with 1.37. High percentage of unhatched embryos were obtained, trochophore with 61.82 early veliger with 80.5 and veliger with 57.0%. Those unhatched embryos died after two weeks inside of the egg capsules. It is thus concluded that the radiosensitivity on embryos are directly proportional to their age and exposure time. Further analysis of the mechanism of the unhatched eggs would be worthwhile.

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