8.07 Establishment of comet assay in haemocytes of *Biomphalaria glabrata* (SAY, 1818).

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Introduction: The comet assay is a method developed to detect breaks in the DNA. The fragments of the damaged DNA show low molecular weight; on the electrophoresis they migrate first in relation to the weightier ones, acquiring the general aspect of a comet. This is a promising test for studies on genotoxicity, DNA repair, environmental and human monitoring. **Objective:** To standardize the comet assay in haemocytes of *Biomphalaria glabrata*. **Methodology:** Haemolymph of wild-type snails of the species *Biomphalaria glabrata* exposed to the Co-60 gamma radiation (12,5, 25, 50 e 100Gy) was mixed with low-melting point agarose and placed on the slide prepared with normal melting point agarose. The cells were lysed overnight, and there after exposed to an alkaline solution (pH>13) for 30 minutes. After the electrophoresis, the slides were neutralized with Tris solution, stained with ethidium bromide and analyzed in fluorescence microscope. **Results:** The control group did not form comets, but the exposed groups showed comets of several sizes and cells have suffered apoptosis. **Discussion:** The data has shown that how the bigger the dose of radiation, the greater the damage induced. The doses of 50 and 100Gy have shown citotoxic effect, with a high frequency of apoptotic cells. The obtained results have shown the sensitivity and capacity of this assay to detect the effects caused by Co-60 gamma radiation.