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Title Mutagenic evaluation of a rodenticide in the in vivo micronucleus assay

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Numerous investigations related to rodent control have been carried out in our country, developing technology for the production of new rodenticides under tropical conditions. Biorat is a biological rodenticide whose active principle is the bacterium *Salmonella enteritidis* var. Danysz. This product was produced by the LABIOFAM Company and due to its actions as a biological control it has a wide potential on rodents.

The development of these products necessarily has to carry in parallel an evaluation system that makes it possible to know with certainty the impact that such biotechnological products may cause on human and animal health and the environment. For this reason, it is essential to carry out a biological evaluation of these biopesticides, which includes studies on their possible toxic and genotoxic activity.

Among the genetic assays with mammals, the Mouse Bone Marrow Micronucleus Assay has been widely used as an indicator of in vivo genotoxicity, which is why our work has as its main objective to determine the genotoxic potential of Biorat using this assay.

The results obtained indicate that the evaluated dose of the product does not induce cytotoxic or genotoxic effects on polychromatic erythrocytes (PCE) of the mouse bone marrow; therefore this product does not cause chromosomal damage in vivo under our experimental conditions.

Keywords:

Micronucleus Assay, Genotoxicity, Mutagenesis.