



Federal University of Pampa
Research Group in Cell Toxicology
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Statement of Importance

To Acta Scientiarum Health Sciences

The aim of this study was to demonstrate the mutagenic effect of chlorpyrifos in cultured human leukocytes, assessing parameters as frequency of micronucleus, numerical chromosomal instability, and percentage of apoptosis. The range concentration used (3, 35, and 350 $\mu\text{g/mL}$). Here, we report that the two higher concentration used caused mutagenic effects in leukocytes. The literature reports few studies about mutagenic effects in human cells. Notwithstanding, leukocytes are sensitive to assess toxicity of xenobiotics exposure. Exposures to chlorpyrifos commonly reach systemic blood stream and elicit clinical conditions, but so far its mutagenic effect on human leukocytes has remained unknown. We believe that the data of chlorpyrifos we present here could cooperate with broader discussions about its safety and toxicology.

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