**II.** **ABSTRACT**

STYROFOAM or Expanded Polystyrene (EPS) is one of the most polluting materials on the planet. From its production to its disposal, it is used irresponsibly. The environmental impact of EPS is alarming; when it reaches bodies of water, it is consumed by fish, mimicking plankton. This causes intestinal blockages, leading to death by suffocation. Even in small amounts, it prevents fish from diving into deep waters, making them easy prey for predators. When EPS is burned, the emitted gases are highly toxic and carcinogenic to humans, including CFCs and dioxins, as well as hydrogen chloride, a precursor to acid rain.

The objective is to evaluate the percentage of physical reduction of EPS through the metabolism of ***Tenebrio Molitor*** and ***Zophoba Morio*.**

The experimental design consists of random blocks, including 2 control bases and 4 treatments. In these treatments, the EPS is exposed to the metabolic consumption by ***Tenebrio Molitor*** and ***Zophoba Morio***. It is estimated that the gastric enzymes of the larvae metabolize the EPS molecules, allowing them to be reintegrated into the environment as an organic substrate with a high nitrogen level that facilitates seed germination in greenhouse seedbeds.