## Biodegradable Polymer Larva cerambycidae (Expanded Polystyrene)

Fernandez Tocto, Edin (School: Alfredo Tejada Diaz) Saldana Diaz, Elder (School: Alfredo Tejada Diaz)

The research report tries to explain through the experimentation we did with the larva Cerambycidae, which is a beetle that lives as a parasite in cocoa crops in the Amazon, for farmers it is a pest; but nevertheless it is a Biological agent in the biodegradation of the polymer (Expanded Polystyrene) in an easy and simple way, since they consume it with ease, giving it the appropriate conditions (in a greenhouse). Through it, the contamination of this polymer is reduced. This research is Explanatory, which shows an Experimental Design and Method, which explains how Cerambycidae larvae consume polystyrene (Expanded Polystyrene) and degrade it; significantly improving the reduction of this material. In the end we found that the Cerambycidae larva does biodegrade the Expanded Polystyrene naturally, in the experiments we work with 15 larvae to break down Expanded Polystyrene of 20 grams of simple type in a greenhouse; and in this way we test our hypothesis, in addition something that we can add is that the results vary since the worms are not the same, varying in nature, behavior, size, composition, since those with larger size consumed more than the smallest ones the results vary After a long process of scientific research dedicated to the study of the Larva Cerambycidae in the biodegradation process of Expanded Polystyrene, we affirm that said larva is an ideal being to fight the contamination issue caused by said polymer in our society; since during the time they were under research we checked their efficiency and capacity.