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INFLUENCE OF DIFFERENT FILLERS ON THE MECHANICAL PROPERTIES OF PHBV COMPOSITES BEFORE AND AFTER BIODEGRADATION

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The accumulation of garbage generated by the disposal of plastic causing problems such as environmental, created the need to develop biodegradable materials. Poly (hydroxybutyrate-co-hydroxyvalerate) - PHBV matrix is used as a thermoplastic polyester and a biodegradable polymer. The use of natural fibers has the advantage of renewable font, low cost, low density and low abrasive and, how the nonocargas, clay and graphite, contribute to production of a material that, in addition to collaborating with the environment, has good physical and mechanical properties. In this study, the concentration of the different fibers was 20% and 3% nanoclays. After processing the material, via extrusion and injection, the biocomposites were analyzed morphologically and mechanics to obtain their properties, before and after different times of biodegradation.