

Abstract

The present study relates to the design and the experimental characterization of the laminated dwarf palm tree / epoxy-fabric composites*. Various specimens were designed and then tested in the 3-points bending test. The reinforcement used in this study was a natural fiber 100%) which is biodegradable and can be recycled. It was recovered in domestic tablecloths. The analysis of the test results made it possible to] highlight the mode of behavior-in-inflection of the specimens tested. Several parameters were considered, namely the orientation of the] reinforcements and the number of folds with the Doum reinforcements. Other shares, these laminates have worked out with vegetable fibers,) which have a good adherence with the matrix, resulted in the compatibility of two materials. The use of this type of fibers like composite, material reinforcement enters to develop new materials and technologies, taking into account the impacts on the environment and the] valorization of natural fibers of renewable vegetable origins, available in sufficient quantity on the Mediterranean littoral