215-045

BENDING TESTS IN EPOXY COMPOSITES REINFORCED WITH FIQUE FIBERS

Teles, M.C.A.(1);

Universidade Estadual Do norte Fluminense(1);

Environmentally correct composites, made from natural fibers, are among the most investigated and applied today. In this paper, we investigate the mechanical behavior of epoxy matrix composites reinforced with continuous fique fiber, through bending tensile tests. Specimens containing 0, 10, 20 and 30% in volume of fique fiber were aligned along the entire length of a mold to create plates of these composites, those plates were cut following the ASTM standard to obtained bending tests specimens. The test was conducted in a Instron Machine and the fractured specimens were analyzed by SEM, the results showed the increase in the materials tensile properties with the increase of fiber amount.