MORPHOLOGICAL AND MECHANICAL CHARACTERISTICS OF *NEUROPELTIS ACUMINATAS*(NA) FIBERS

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ABSTRACT

This present work aims to determine the morphological and mechanical characteristics of fibers from a Cameroon liana locally called "NdikKussa" scientific name *Neuropeltisacuminatas* (NA). The vines are cut in a forest of southern CAMEROON in NGALANE near EBOLOWA. The fibers are extracted by us using the traditional method used to make the kussa. SEM micrographs of the cross section of the fiber are made and tensile tests on fibers of 90 mm length are conducted. These investigations reveal that the cross-section of the fiber is rectangular with channels around which cells are distributed with visible lumens. They also reveal a Young module is 6.043GPa, a maximum tensile stress is 61.64 MPa, and an elongation of 0.0102%.

Keywords: Fibers; SEM Micrographs; Characteristics; Morphological; Mechanical; *Neuropeltisacuminatas*; ndik- kussa.