

**DEVELOPMENT OF ENZYMATIC RETTING ON PINEAPPLE LEAF
FIBRES**

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ABSTRACT

DEVELOPMENT OF ENZYMATIC RETTING ON PINEAPPLE LEAF FIBRE

This study focused on the development of enzymatic retting on red dwarf pineapple (*Ananas Lucidus*) leaf with combination of enzymes and chemicals. Formulations used in this project were combination of xylanase and EDTA and xylanase, amylase and EDTA. Untreated sample was used for comparison purposes. The physical effect and properties of the fibre were tested for fibre fineness, colour changes on fibre after scouring process and single yarn strength and elongation. The finest fibres obtained were those treated with combination of xylanase, amylase and EDTA (7.11 micronaire) while the strongest of yarn obtained was combination of xylanase and EDTA (4.52N of forces needed to break the yarn at 3.64% of yarn elongation). Overall compared to conventional, formulation of xylanase and EDTA produced strongest fibres while formulation of amylase, xylanase and EDTA produced finest fibres.