

Abstract

Studies on Natural fibers are intensive these days due to their eco-friendly nature and special properties. Possibility of discovering certain non-conventional sources for natural fibers is being explored. Plant fiber is one of the lignocellulose fibers that use in textile industry. However natural fiber not enough for any textile application and has to compete with synthetic fibers. In this present research, a cellulosic fiber was extracted from the trunk of Carissa Edulise plant by two different methods such as chemical and water retting. The extracted fiber was examined for its diameter, fineness, tensile strength and elongation by using the ASTM method. The diameter of the fiber was found to be 16.85 -17.95 microns with a fineness of 0.58 - 0.65 Tex .The tensile strength and elongation of the fiber were found to be 135 gm/ Tex and 37.8%. with Moisture content and moisture regain of fibers 8.3% and 9.09% respectively. From the result, it is observed that the fiber had properties like those of other cellulosic fibers such as jute and sisal. Since, it is believed to be a potential source for natural cellulose textile fiber that can be used for apparel textile and paper application in textile industries