

Extracting Fiber from Banana Corm

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This research study investigates the extraction of fibers from banana corms, an underutilized agricultural byproduct. With the aim of promoting sustainable resource utilization and waste reduction, we explored the potential of banana corms as a source of valuable fibers. The methodology involves a series of stages, including chopping corm particles in to 0.5 cm to 1cm, digestion by using digestion chemicals, washing to remove impurities, drying and subjecting to the particular product's production. Structural and chemical analyses were conducted using scanning electron microscopy. The fiber content of banana corm is 12.12%, and the average moisture content of banana corm is 85.7475%. from one kilogram of banana corm. The fibers exhibited potential applications in such things as writing papers, craft papers, decoration items, wrapping papers, and food containers. This research establishes the feasibility of obtaining valuable fibers from banana corms, contributing to the field of natural fiber research. Through this study demonstrates the accessibility of banana corm fiber for eco-friendly products production. The utilization of banana corms not only adds value to agricultural residues but also aligns with sustainable practices, reducing waste in the banana industry. This study provides a novel alternative for various industrial applications, furthering the understanding of the potential of banana corms in the pursuit of sustainable resource management.

Keywords: *Sustainable resource; Banana corm; Writing papers; Fiber extraction; Fiber content*