



**DRAFT TANZANIA STANDARD**

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**Textiles – Flax and Hemp Fibre - Glossary of Terms**

**TANZANIA BUREAU OF STANDARDS**

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## 0. FOREWORD

The trends towards sustainable materials have renewed the application of flax and hemp fibres in textile and non-textile industries due to their environmental benefit.

The recently trends towards flax and hemp fibre in the global textile chain supply have increased due to environmental and sustainability issues. These fibres can also be the prospect of big export market in the near future constituting an important sector of Tanzania's economy.

In order to facilitate consistency exchange of commercial and scientific information within the industry and emphasize the use of current terms in the flax and hemp trade in general, the work of standardizing terms was considered imperative.

In the preparation of this Draft Tanzania Standard, assistance was derived from:  
*ASTM: D6798 – 02 (Reapproved 2018) Standard Terminology Relating to Flax and Linen*

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## 1. SCOPE

This Draft Tanzania Standard gives technical definition to terms relating to flax and hemp fibre as applied in Tanzania and international fibre industry.

## 2. TERMS AND DEFINITIONS

For the purpose of this Draft Tanzania Standard, the following terms and definitions shall apply:

### 2.1 average fibre width ( $\mu\text{m}$ )

arithmetic mean width of a selected group of fibers in a two-dimensional image plane.

### 2.2 bast fibres

plant fibre collected from the phloem, or fibers found in the layer of phloem of the flax stem between the inner xylem tissue and the epidermis tissue.

### 2.3 combing

processing of tow so as to produce tops or sliver which have the staple length and width suitable for use in the worsted spinning system.

### 2.4 cottonizing

processing of flax or hemp fiber so as to make it suitable for use in the cotton spinning system.

### 2.5 decortication

extraction of fibre from the plant stalks after the retting.

### 2.6 chemical retting

retting process under the influence of chemical reaction, temperature and duration time to degrade the straws.

### 2.7 delta-9 tetrahydrocannabinol (THC),

compound found in hemp plant (cannabis) and is known as the main psychoactive ingredient.

### 2.8 de-seeding

process of removing seeds and seed-holding structures from plants.

### 2.9 dew retting

process of pulling or cutting of the straw and leaving on the soil for a period of time to allow partial degradation of straw to effect retting.

### 2.10 enzyme retting

process of mechanically adding enzyme formulations under precise conditions to pulled or cut flax straw for a period of time to effect retting.

### 2.11 fibre bundle

group of ultimate fibers which are held together in the flax stem by pectins, lignins or any combination thereof.

**2.12 flax**

generic name for plants that are botanically classified as *linum usitatissimum*, which are cultivated for seed and/or fibre.

**2.13 hammer mill**

type of decorticator whose purpose is to shred or crush the stalks causing the fibre to separate from the core.).

**2.14 industrial hemp**

plant species *Cannabis sativa* L. and any part of the plant which contain low delta-9 tetrahydrocannabinol (THC) of not more than three-tenths of one percent (0.3%).

**2.15 hackling**

process of cleaning and aligning long fibers from bast fibre to improve fineness and remove non-fibrous materials and short fibers.

**2.16 linen**

yarn or fabric made solely from flax fibers.

**2.17 linen blend**

yarn or fabric made from a combination of flax and other fibers.

**2.18 long line,**

in flax, flax fiber bundles that have a minimum length of 50 cm.

**2.19 over-retting**

decomposition of the fibre stalks has caused excessive deterioration of bast fibers.

**2.20 mechanical cleaning**

mechanical extraction which is applied after retting aiming to clean off the shives and cuticularized epidermis from the fibre.

**2.21 post-decortication**

process of removing contaminated shives associated with fibre to achieve certain requirement of fibre.

**2.22 retting**

process of partial biological or chemical decomposition of pectins and other components which bind the fiber, fiber bundles, and the non-fiber structures, thereby facilitating removal of bast fibers from stems. (See underretting and over-retting)

**2.23 scutching**

mechanical beating and scraping of the straw subsequent to break and separate the shives and tow from the fibre.

**2.24 fibre shives**

woody parts of the flax plant which are not fibers.

**2.25 spun yarn**

cord made by twisting loose strands of yarn together.

**2.26 stand retting**

retting method where glyphosate **is** used as a drying agent (pre-harvest) to facilitate straw retting.

**2.27 straw**

refers to dried stems and plant parts such as roots, leaves, and seed holding structures.

**2.28 tow, (or hards)**

coarse, broken fibre, removed during processing bast fibre (hemp, flax, kenaf, or jute) and separated from the shives.

**2.29 rash**

any non-fibrous material.

**2.30 ultimate fiber**

individual bast fibre.

**2.32 under-retting**

when the decomposition of stalk is insufficient to allow fiber bundles to be easily removed from the non-fibrous parts of the stem.

**2.33 water retting**

process of immersing straw for a period of time in water to effect retting.

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