

Clothing and TEXTILES

UTAH STATE UNIVERSITY COOPERATIVE EXTENSION

FROM FIBER TO FABRIC: LINEN

INTRODUCTION

Flax is a filament fiber harvested from flax plants that when made into fabric, is called linen. Flax is the oldest fiber on record, first grown by the Egyptians having along the banks of the Nile (Kadolph, Langford, Hollen & Saddler, 1993). Other sources lay claim to the earliest usage of flax to be in the Stone Age (Cohen & Johnson, 2010). The term "linen" is often misused, being applied to fabrics that simply look like linen, or being used as a general term for sheets, towels, and tablecloths.



Figure 1: Flax seed.



Figure 2: Flax plant.



Figure 3: Flax fiber.

Flax is still widely used today, though it is less prevalent than it once was due to the ease of obtaining fabrics made of other fibers, such as cotton. Because flax is difficult to harvest it has become more costly to produce linen. Flax plants are used for many purposes, but the fiber itself comes from the stem and root of the flax plant, requiring careful harvesting, often done by hand. After the initial harvest, flax must be dried, soaked, crushed, combed and spun, creating a lengthy process that increases cost for consumers (Kadolph, Langford, Hollen & Saddler, 1993; Liddell & Samuels, 2012).



Figures 4 and 5: Linen fabric from flax plant.

ADVANTAGES OF LINEN FABRIC:

- Excellent strength, gains strength when wet
- Hydrophilic: absorbs water and dries quickly
- Cool in warm weather
- Washable
- Withstands very high temperatures when washing and ironing
- No static, pilling, or lint problems
- Unique texture from the thick-and-thin pattern of the fibers

END USES OF LINEN FABRIC:

- Apparel: suits, skirts, jackets, dresses
- Interiors: tablecloths, napkins, wallpaper



Figures 6 and 7: Care label for linen clothing.

DISADVANTAGES OF LINEN FABRIC:

- Wrinkles very easily
- Fair abrasion, low durability
- Poor drape and elasticity
- Expensive

REFERENCES:

Cohen, A.C., & Johnson, I. (2010). *J.j. pizzuto's fabric science* (9th ed.). New York: Fairchild Books.

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Liddell, L., & Samuels, C. (2012). *Apparel: Design, textiles & construction* (10th ed.). Tinley Park, IL: Goodheart-Wilcox.

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