



What is Flax Fiber / Linen?

WHAT IS FLAX? HOW IS IT DIFFERENT FROM LINEN?

Flax (*Linum usitatissimum*) is a bast fiber plant that can be grown for either fiber or oilseed. Varieties grown for fiber are bred for long, strong, high-quality fibers, while oilseed varieties prioritize seed quality and quantity. When densely planted for fiber, plants average three to four feet (0.9 to 1.2 meters) tall. In North America, fiber flax is usually planted from March to May and harvested approximately 85–100 days later, in July and August — about one month after the plant begins blooming. Flax produces delicate blue flowers that bloom for just a single day. Flax is the raw plant and fiber source, while linen is the finished fabric made from those fibers.

WHAT ARE FLAX AND LINEN USED FOR?

Linen and flax fiber are used in a wide range of products, from home furnishings (towels, bathrobes, sheets, blankets, and bedding) and children's products to apparel of all kinds. Even U.S. currency banknotes are made from a 25/75 linen-cotton blend.¹ Flax also appears in building materials, animal bedding, industrial twine and rope, and paper. Long "long-line" fibers — 20 to 40 inches (roughly one-half to one meter) — are woven and knit into apparel and household linens as well as high-end composites and veneers. Short "tow" fibers — 4 to 6 inches (10 to 15 cm) — are used where reinforcement matters: plastic composites, insulation, specialty papers, upholstery fabric, canvas, and twine.²

ATTRIBUTES AND BENEFITS

Flax is a strong, durable fiber; with proper care, linen can last for decades. It absorbs dye well and does not pill. As a cellulosic fiber it is similar to cotton, but stronger, stiffer, more sunlight-resistant, and faster drying. Flax has a high natural luster, an attractive texture of irregular fiber bundles, and a natural color ranging from beige to light grey. It also has good thermo-regulating properties, providing coolness in hot weather and warmth in cool weather.³ In a study of representative samples of 100% linen, cotton, viscose, and polyester, linen achieved the best results for ventilation and breathability, thermoregulation, and moisture management.⁴

FIBER FLAX VS. OILSEED FLAX

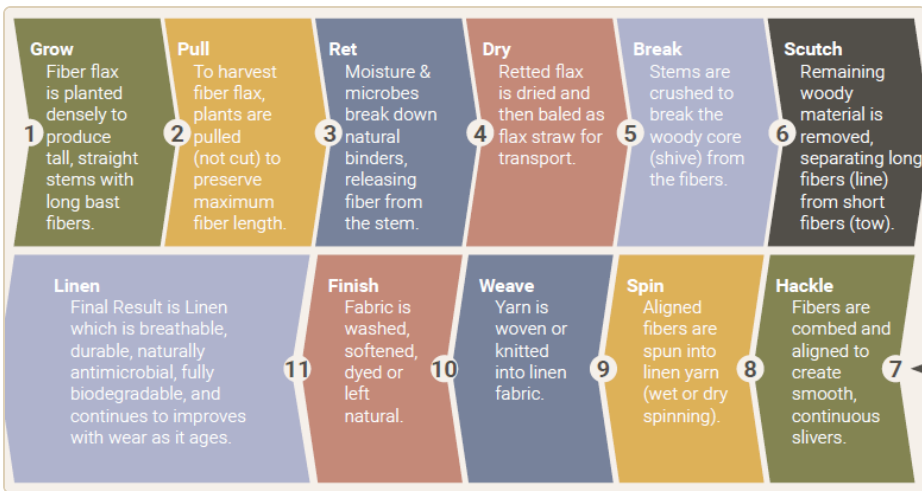
Two primary types of flax are grown: **fiber flax**, used for linen and textiles, and **oilseed flax**, grown for seed that is processed into food, feed, and industrial products. A single flax crop can yield both fiber and seed, and the flaxseed meal remaining after oil extraction is a valuable ingredient for livestock and human nutrition. Flax straw left after an oilseed harvest contains short bast fibers that — while not suited to high-end linen — can be mechanically refined for short-staple products such as drapery, denim, and canvas, as well as paper, nonwovens, insulation, and biocomposites. Using oilseed straw this way adds value to what was once a byproduct.⁵

HOW MUCH FLAX IS GROWN GLOBALLY AND IN THE U.S.?

Fiber flax made up only about 0.3% of the global fiber market in 2024, with roughly 0.3 million tonnes produced. Approximately 70% of that fiber flax was grown in Europe, where France is the largest producer; other key producers include Belgium, the Netherlands, Belarus, China, Russia, Egypt, and the United Kingdom.⁶ In 2024, an estimated 457,145 acres (185,000 ha) of fiber flax were grown in Europe, with France accounting for about 87%.⁷ In North America, fiber flax remains very limited: roughly 110 acres (45 ha) were grown in the United States and about 6 acres (2.4 ha) in Canada in 2024, according to a 2025 NALA survey; of the U.S. total, 10 acres were grown using organic practices. By contrast, oilseed flax is produced on about 12 million acres globally, with the largest production in Kazakhstan, Russia, Canada, Europe, and China.⁸

FIBER FLAX PRODUCTION AND PROCESSING STAGES FROM FIELD TO FINISHED PRODUCT

There are multiple production and post-harvest processing stages before flax becomes a finished linen textile or nonwoven product. These include growing, pulling, retting, drying, breaking, scutching, hackling, spinning, weaving, and finishing.



See our [Definitions](#) overview for more information.

REFERENCES

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8. Agricultural Marketing Research Center. August 2025. *Flax*.

Adapted from the North American Linen Association, *Status of Flax Fiber in North America* (March 2026). The full report, with complete sources and links, is available at northamericanlinen.org.