COTTON

Cotton is a member of the Mallow family of plants. The Arabic people called it “Qutun,” which is where we get the word, “cotton.”

US paper currency isn’t paper at all, it’s a blend of 75% cotton lint and 25% linen. A 480 pound bale of cotton can be made into over 313,000 $100 bills.

The primary Yuma Variety is short staple, Upland cotton. It is the major species of cotton grown world-wide, accounting for about 90 percent of planted acreage. Upland cotton has a fiber length of about 1 ¼ inches. The Pima variety, also grown in the county, has a fiber length of 1 ½ inches. Pima cotton is most readily identified in the field by its bright yellow blooms, which are much brighter and richer in color than the creamy white Upland blossoms.

In 2005, cotton acreage was over 27,000 acres of upland cotton and just over 1000 acres of Pima cotton with a combined value of over $20 million. Among all Arizona Counties, Yuma County cotton production ranks 3rd in the state.

To preserve fiber quality and length, Pima cotton will most likely be “roller-ginned,” a type of ginning process that forces the seed out of the lint, rather than cutting it loose in an Upland “saw gin.” Pima prices are frequently 30 to 50 percent higher than Upland cotton prices.

The average cotton yield is about 1400 lbs./acre valued at $700/acre.

Cotton is a unique crop in that it is both food and fiber. Cottonseed is used as a supplement for dairy feed and is also processed into oil. Uses for cotton fibers range from heavy industrial to fine fabrics.

Cotton grows best on fertile, well drained soils that have a good water holding capacity, although it can grow on a variety of soils.

With warm springtime temperatures, hot summers, and dry falls, Yuma is a prime location for cotton production.

Planted in March and April, cotton is furrow irrigated.

The cotton plant requires about 180 - 200 days from planting to full maturity.

Irrigation typically ends in July/August, the plant is allowed to dry. After the plant is defoliated, the crop is mechanically harvested.

Cotton quality is based on its external appearance, brightness, color and fiber length and strength.

Cotton plants have a general time frame in which they grow and produce after planting (introducing the seed to moist soil). With ideal conditions, the planted cotton seed will germinate (to begin to grow) or sprout and emerge in about five to ten days.

Botanically, the cotton fiber is classified as a epidermal hair growing on the epidermis of the cotton seed. Fibers grow and thicken within a boll and, as it enlarges, it becomes approximately the size of a small fig.
Cotton fibers thicken at maturity by the production of cellulose (a carbohydrate, the chief component of the cell wall in most plants). An average boll will contain nearly 500,000 fibers of cotton and each plant may bear up to 100 bolls.

Seeds are separated from the cotton and the cotton is cleaned at the cotton gin. From the gin, the clean fiber is pressed together and made into bales. Each bale weighs about 500 pounds. Two hundred fifty pairs of men's cotton pants can be made from one bale of cotton. Or, 1,217 men's shirts, or 764 dress shirts, or 896 woven blouses, or 542 women's skirts, or 328 women's jeans, or 3,015 baby diapers, or 782 terry bath towels, or 7,820 men's handkerchiefs, or 484 men's dress pants, or 373 men's work pants, or 180 men's overalls, or 210 sheets, or 1,210 pillow cases.

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