Cottons (from the arabic quotn) are useful in that some species produce spinnable fibers (lint) on the seed coats. Such fibers begin as elongated cells growing outward from the surface of the ovule. As the ovule enlarges, successive layers of cellulose are laid down in a helical pattern by the protoplast. As the fiber matures, the protoplast dies, and the cell wall, which is virtually pure cellulose, collapses inward to form a convoluted ribbon. The flattening and convolution of the dried cell wall promotes adhesion when the fibers are twisted together in yarn bundles during spinning.

There are four domesticated species of cotton. *Gossypium arboreum* L. and *G. herbaceum* L. (Fig. 1-1 and 1-2), both diploids, are native to the Old World. *Gossypium arboreum* remains an important crop in India, whereas *G. herbaceum*, important in earlier times, is today grown mostly for local use in the drier areas of Africa and Asia. *Gossypium barbadense* L. and *G. hirsutum* L. (Fig. 1-3 and 1-4) evolved in the New World. Both are allotetraploids. *Gossypium barbadense*, commonly known as extra-long-staple, Egyptian, and Pima cotton, and other names, supplies about 8% of the current world production of fiber. The fiber is used mostly for the production of luxury fabrics and sewing thread. *Gossypium hirsutum*, known most widely as Upland cotton, contributes about 90% of the current world production of 65 million bales of fiber weighing about 218 kg/bale. Upland cotton fibers are used in the manufacture of a variety of textile products, cordage, and other non-woven products. Linters, the short fibers removed from seeds before crushing, are an important source of industrial cellulose.

Although cotton is grown mostly for fiber, the seeds are also important. Cottonseed oil is used for culinary purposes, and the oilcake residue is a protein-rich feed for ruminant livestock. Cotton is grown virtually around the world in tropical latitudes, and as far north as 43°N lat. in the USSR, and 45°N in the People's Republic of China (PRC).