

## Biosafety Clearing-House (BCH)

ORGANISM (ORGA)

BCH-ORGA-SCBD-12080-6

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### Organism information

Scientific name

Gossypium hirsutum

Taxonomic Classification

Kingdom Plantae  
Phylum Magnoliophyta  
Class Magnoliopsida  
Order Malvales  
Family Malvaceae  
Genus Gossypium  
Species Gossypium hirsutum

Common name(s)

Cotton

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Type of organism

Crops

Domestication

Domesticated

### Characteristics related to biosafety

Centre(s) of genetic diversity

Gossypium hirsutum (Mexican Cotton): Wild populations of G. hirsutum are found in coastal vegetation of Central and southern North America and were also encountered on islands of the West Indies and islands in the Pacific. Cotton remains dating to 3500 BC have been found in the Tehuacan Caves in Mexico. Spanish explorers in the 1500's found cotton under cultivation throughout the Mexican and Central American lowlands. With the arrival of the Spaniards in the Americas, the annual forms of Mexican cotton were spread to other parts of the world and during the past 200 years, commercial cottons have been derived mainly from Mexican Cotton.

Gossypium arboreum (Pakistani-Indian Cotton): Native to Northwest India and Pakistan. Some cultivars are tall perennial shrubs, others short annuals. One of the perennial cultivars was

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introduced to East Africa and 2000 years ago was being grown by the Meroe people of Nubia who are considered to be the first cotton weavers in Africa. This variety of cotton was spread to other parts of Africa including Kano in Nigeria which from the 9th century became a cotton manufacturing centre.

*Gossypium herbaceum* (African-West Asian Cotton): Native to sub-Saharan Africa and Arabia in semi-desert and savanna where it grows as a perennial shrub. It was probably domesticated in Ethiopia or southern Arabia and its cultivation spread to Persia, Afghanistan, Turkey, North Africa, Spain, Ukraine, Turkestan and China (first cultivation in China was in about 600 AD). Domestication included selecting for cultivars that grew as annuals.

*Gossypium barbadense* (South American Cotton): Probably once widespread along Pacific and Atlantic coasts of South America, wild populations of this species are now only known from coastal Ecuador. The oldest cotton textiles recorded from South America are from archaeological excavations in the northern Chilean desert and date to 3600 BC. Cotton growing became widespread in South America and spread to the West Indies where Columbus encountered it. In about 1670, planting of *G. barbadense* began in the British North American colonies when cotton planters were brought in from Barbados.

#### Habitat range

Cotton is cultivated in areas of intense heat. In the dryer climates irrigation produces high quality cotton. Cotton is grown either as a dryland crop, relying on rainfall, or as an irrigated crop where a reliable water supply is available.

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#### Common use(s)

Other (Industrial)

### Additional Information

Cotton is of the *Gossypium* genus that is grown on every major continent and on West Indies and Pacific Basin islands. There are about 39 species of *Gossypium* worldwide, native to the tropics and warm temperate regions. Four have been domesticated and of these, *Gossypium hirsutum* from Mexico has become the predominant species in commercial cotton production worldwide.

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#### Other relevant website addresses and/or attached documents

? [OECD Consensus Document on Compositional Considerations for New Varieties of Cotton \(\*Gossypium hirsutum\* and \*Gossypium barbadense\*\) Key Food and Feed Nutrients and Anti-Nutrients.pdf](#) ( English )

? [The Biology of \*Gossypium hirsutum\* L. and \*Gossypium barbadense\* L. \(Cotton\).pdf](#) ( English )

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## Further Information

Questions about the Cartagena Protocol on Biosafety or the operation of the

Biosafety Clearing-House may be directed to the Secretariat of the Convention on Biological Diversity.

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on Biological Diversity**

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