

LBG MARKET UPDATE

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The species carob (*Ceratonia siliqua* L.) is a slow-growing evergreen tree native to the Eastern Mediterranean area. The tree blooms in the autumn and carries the young fruit to the end of the next summer.

Ceratonia siliqua L. bears fruit at the age of six to eight years. At an average, a tree then yields 100 - 120 kg/y of fruit. The abundance of fruit is greater every second year. The endosperm is extracted from the seed to produce the galactomannan locust bean gum.

Carob is a typical Mediterranean tree species that can be found in the coastal areas. Both wild and cultivated populations can be found, with the wild populations being found under very different environmental conditions, showing different growth characteristics.

The fruits from carob are harvested in September. In Portugal and Spain, most carob plantings are located on steep, rock sites, unsuitable for other agricultural crops and require hand harvesting. Harvesting represents 30-35% of the total production cost. Harvested carob pods are first "kibbled", a coarse grinding process that separates the pod from the unbroken seeds.

In larger parts of their distribution range, Carob trees are under increasing pressure, mainly because of urbanization and conversion of areas to agricultural land.

Carob production is still centred in Portugal and Spain, which have probably 100,000 ha of carob trees and process about half of the world's commercial supply. World production of pods is estimated to be in the range of 350,000 - 500,000 t/year and the main producers are Morocco, Spain, Italy and Portugal. Morocco is seen as the main place where plantations are expanding and this country has become one of the dominant suppliers of seeds.

Yields of pods are extremely variable and depend very much on the cultivar in question, as well as climatic and other conditions where the trees are growing and could be between 0.5t and 2.5t/ha. Yields increase steadily up to 25-30 years of age but may be high one year and low the next. Well cared trees have a productive life of 80 years and longer.

The seeds usually comprise 8 - 10 % of the pod by weight. Locust bean gum (endosperm) may comprise as much as 35 - 40% of the seed's weight.

A number of grades of LBG are available, and for each grade, it is possible to have different particle sizes according to the requirements of the user. The highest grades are the near-white powders, free from specks of seed hull and particles of seed germ are at a minimum. The top grades have the highest viscosity.

CURRENT MARKET SITUATION and OUTLOOK



LBG prices in the past seemed to follow a 10-year cycle of raw material price movements, which we saw in 1995, 2005 and roughly from 2016 onwards, this time with a little delay and also for the first time for longer than 2 years.

Since our last market update released in November 2019 the raw material situation has changed rapidly and deteriorated significantly. These very recent developments make it necessary to release this update and our now different views of the outlook in the LBG market.

Our view of the market with regards to raw material availability as described in our last market update is still largely valid, but now it has become political as well as speculative presenting the LBG producers with additional elements making the situation quite uncontrollable.

Emergency visits early January to our raw material suppliers and markets confirmed our concerns and the rumours. Some existing contracts, closed as recently as October 2019 won't be honoured, and seed prices are rising quickly and sharply, also helped by the fact that some LBG producers now outbid their competitors right away after these have committed, and making this look rather like an auction for parcels of carob seeds.

This behaviour has immediately affected the prices for LBG, which now easily could reach historic heights in the short term.

Our suggestion to our customers and LBG users in general therefore is to now seriously and dedicatedly look into alternative recipes based on LBG with other gums. Such systems have been developed and were used widely during the past price peaks, they recently and in light of the expected market development have been further optimized and can give the LBG users a valid technical and commercial option, reducing the dependance to LBG.

We will be happy to offer you such solutions, please contact us to discuss your needs.

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