

BORDER CROSSINGS

ORIGINS

BOTANY BAY LEARNING RESOURCES

Maize (Corn)



https://upload.wikimedia.org/wikipedia/commons/2/2b/Indian_Corn_Maize_Zea_mays_3008px.jpg

What do Indigenous people call this plant?

The name maize comes from Taíno, the Arawakan language. The Taino name for maize is “mahiz”. The Spanish called it “maiz” which is where the English name derives from. Maize has been selectively grown from a wild grass called teosinte. Teosinte looks similar to maize, although it is much smaller and has fewer kernels. By saving and replanting the biggest and best kernels, the farmers were able to create the more familiar maize we see today.

When was this plant first documented?

Maize seeds and the plants grown from them in Spain were first written about in 1493 by Peter Martyr. The first illustrations appeared in Oviedo’s “Historia General y Natural de las Indias, Islas y Tierra Firme del mar Océano” in 1535.

How many varieties of this plant are known?

There are more than 50 varieties of maize. The main varieties are dent corn, flint corn, flour corn, popcorn and sweet corn. The varieties are based on the size of the kernel, the colour and the amount of starch in each kernel. However, botanists believe that all the types of maize come from one plant type. Flour corn and popcorn are the oldest varieties of corn

Where and how was the plant originally grown and used?

Maize was first domesticated by Indigenous peoples in southern Mexico about 10,000 years ago. They selectively bred and altered it so that it could be grown almost anywhere apart from at very high altitude.



Maize was cultivated as part of the Three Sisters gardening technique. This efficient system allowed three crops to be grown together. Maize was planted in the middle of the plot, climbing beans were planted around the maize (which used the maize as support) and pumpkins (or squash) were planted around the edge. The taller maize and climbing beans offer shade to the low lying pumpkin vines. The beans fix nitrogen into the soil to feed the squash which suppress weeds and shade the ground. The pumpkin vines also stop the ground from getting too dried out which means the maize crops will be larger. So, in combination, the plants work together.

How do Indigenous people relate to this plant?

Because maize was such an important part of the diet, communal plots were made and people were expected to work on them to support the community. There were also individual plots for people to grow their own food. The Inca built large storehouses to stock with maize and other crops to avoid famine.

Image of seeding, tilling, and harvesting maize from the Florentine Codex

https://en.wikipedia.org/wiki/Maize#/media/File:The_Florentine_Codex_-_Agriculture.tiff

When crops did fail due to too much or too little rain, food from the storehouses could be used to feed the people. To grow enough maize, mountain sides were converted into terraces and complicated systems were created to divert melted glacier water to keep the crops hydrated as maize requires high temperatures for ripening and a lot of water for a large crop.

One of the advantages of flour maize is that after the maize has been roasted and ground, the flour can keep for several months, providing food in the winter or during a famine.

Maize was made into a porridge or gruel called "atole" in Mesoamerica (what we would call Mexico and Central America). The Inca call this porridge "copia".

Maize was also made into maize cakes, but tortillas which are maize pancakes, were only eaten in Mesoamerica.

When and how did this plant first come to Britain?

Despite being popular in Europe, maize production in the UK has been relatively low. It became more popular about 200 years ago as food for cows.

Special properties

To prepare maize for cooking and storage, it was first put through a process called nixtamalization. The maize is soaked in an alkali solution of lime water and ash. This makes the kernels easier to grind. It also improves the smell and the taste of the kernels. It also removes mycotoxins which are types of fungus that live on crops and can make people sick. The biggest benefit is that it means the body can absorb vitamin B3 from the maize. This stops people getting sick with Pellagra (due to a lack of vitamin B3).

Maize, beans and squash were the three staple foods used in almost every meal, to which nopales (a type of cactus) and tomatoes were usually added. Chilli and salt were also used in many dishes.

The Aztec people make alcohol from maize. However, in pre-hispanic America, drunkenness was frowned upon. Poor people could lose their homes - they would be evicted and their homes demolished - and the wealthy could be put to death for public drunkenness.

Fun facts

Today, flint corn is usually used for animal feed. Dent corn is used to make corn oil. Flour corn is used to make breads.

Maize is one of the most important crops in the world today. It accounts for almost 6% of human calorie intake and 10% of global crop production.

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BOTANY BAY is a participation and learning project by Border Crossings' ORIGINS Festival, made possible with The National Lottery Heritage Fund. Thanks to National Lottery players, we have been able to engage five schools across the country with the Indigenous heritage of plants, gardens and food.



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