

ORIGINS

BOTANY BAY LEARNING RESOURCES

Quinine



Quinine plant from medicinal plants by Robert Bentley, 1880.

https://commons.wikimedia.org/wiki/File:Quinine_plant_from_medicinal_plants_by_Robert_Bentley_1880_Wellcome_L0019168.jpg

What do Indigenous people call this plant?

The original Quechua word for the cinchona tree bark is “quina” or “quina-quina”, which means “bark of bark” or “holy bark”. The English word Quinine is derived from this. The cinchona tree is native to what we now call Peru.

When was this plant first documented?

Nicolás Monardes (in 1571) and Juan Fragoso (in 1572) both wrote about the cinchona tree and its uses for medicinal purposes. In their writings, it was mainly used to treat diarrhoea.

How many varieties of this plant are known?

There are 65 varieties of Cinchona trees. However, because of the attention paid to the quinine producing trees, the other varieties are not often seen.

Where and how was the plant originally grown and used?

Cinchona trees like shade, little difference between night and day temperatures and do not like too much water on their roots. The peoples of the Americas cultivated them carefully ensuring they were grown in the correct conditions. In the mid 1700s they grew larger amounts to meet increasing European demand.

How do Indigenous people relate to this plant?

The Quechua people use the bark of the Cinchona tree to make tonics to treat diarrhoea, fevers and shivers. The bark was dried and ground into a powder. This powder was then mixed into water and given to people with upset stomachs and fevers.

When and how did this plant first come to Britain?

Although Europeans had seen and written about the health benefits of quinine in the 1570s, Europeans did not use it very much. Because of its association with the Jesuits, it was viewed with suspicion by many people. There are accounts of quinine being used in the 1700s and 1800s. However, in the 1800s, the British discovered that quinine could prevent malaria and began importing huge quantities and looked at growing it in other parts of the British Empire. This enabled the "Scramble for Africa" in the late 1800s where European countries seized vast areas in Africa and exploited the people and the resources of the continent through policies of colonisation and imperialism.

Special properties

As well as noticing that the bark of the Cinchona tree could be used as a medicine to treat diarrhoea, it was also noticed that it was used to reduce fevers and treat shivering. Shivering is caused by the body trying to raise its temperature to fight a fever or if the body's core temperature has dropped too much. It is also a side effect of Malaria. Agostino Salumbrino sent samples to Rome for testing as a treatment or preventive medicine for Malaria. Because it was so successful at preventing Malaria, it would go on to become one of Peru's most important exports.

Fun facts

Under a UV light, tonic water will have a pale blue glow because of the quinine content.



Tonic Water Illuminated By UV Light

[https://commons.wikimedia.org/wiki/File: Bottle_of_UV_Illuminated_Tonic_Water_\(Pouring\).jpg](https://commons.wikimedia.org/wiki/File: Bottle_of_UV_Illuminated_Tonic_Water_(Pouring).jpg)

The people of what is now known as Peru limited the quantity of bark that was sold to Europeans to restrict the supply. They also banned the sale of seeds and saplings. However, in 1865, Charles Ledger smuggled seeds out of South America which broke the monopoly. The local man that helped him was apparently arrested, beaten and starved to death.

By the end of the 19th Century the Dutch were the world's largest supplier of bark from their plantations in Indonesia.

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