How much water does a cacao tree need?

Cacao trees cannot survive in very dry weather and thrive in climates with high humidity and rainfall. These moisture-loving plants grow best in areas that receive approximately 60 to 80 inches (1,500 to 2,000 mm) of rain per year and cannot survive in regions that consistently receive less than four inches (100 mm) of rain per month.

How many beans are needed to make chocolate?

On average:
- Each tree will yield 20 to 30 pods per year.
- Each pod contains 20 to 40 beans.
- Approximately 400 beans are required to make one pound of chocolate.

How much space does a cacao tree need to grow?

Cacao trees grow 15 to 25 feet (4.5 – 6 m) tall and need an area of about 15 square feet (1.4 square meters).

What kind of soil is best?

Cacao needs soil that is nutrient-rich, retains water well and has good drainage. Soils that consist of large, coarse particles are ideal as they leave free space for the roots to grow.

What pollinates cacao plants?

The cacao plant's primary pollinators are tiny gnat-like flies called midges. Because the flower of the cacao tree is only the size of a nickel and has a very complex design, the midge is one of the only insects small enough to find its way to the center.

Why do cacao trees grow best in a rainforest?

- The primary pollinator of cacao trees, the midge, prefers the damp and dark rainforest over open, sunny plantations where cacao trees are planted far away from one another in neat rows.
- Unlike midges, many pests thrive in a plantation environment. Within the rainforest, pests such as leafcutter ants and caterpillars are held in check by their natural predators, but on an open plantation they can decimate a cacao crop.
- Rainforests meet the shade requirements of cacao trees and provide the high humidity, rainfall and soil conditions necessary for continued growth. Cacao trees grown in the shade and humidity of a forest produce far more pods than plantation-grown trees.
- The surrounding vegetation in a forest protects cacao trees from strong, damaging winds.
- The cacao tree depends on other species, including certain species of monkeys, to eat the pulp out of their pods and disperse the interior seeds for propagation. These seeds are sensitive to sunlight and dry out easily in the less humid plantation environment.

What birds can be found in the rainforest around cacao trees?

Central and South American cacao regions: yellow-tailed oriole, collared trogon, chestnut-mandibled toucan, squirrel cuckoo, laughing falcon, green kingfisher

Western African cacao regions: African grey parrot, green hylia, icterine greenbul, pale-breasted illadopsis, red-bellied paradise flycatcher

Sources

International Cocoa Organization. www.icco.org/about/growing.aspx

American Museum of Natural History. www.amnh.org/sciencebulletins/biobulletin/biobulletin/story720.html

American Museum of Natural History. www.amnh.org/sciencebulletins/biobulletin/biobulletin/story669.html

World Agroforestry Centre. www.worldagroforestry.org/