Clues to why leaves come in many sizes

BBC Article by Helen Briggs¹

Summary

The huge variety of leaves in the plant kingdom has long been a source of wonder and fascination.

The conventional wisdom is that leaf size is limited by the balance between how much water is available to a plant and the risk of overheating. Additionally, there's another part is that about the tendency for larger leaves to freeze at night. The leaves of a banana plant, for instance, are about a million times bigger than the leaves of heather. It is because a banana leaf naturally grows in places that are very hot and very wet. The work of scientist in this aspect is to show that in fact if there's enough water in the soil then there's almost no limit to how large leaves can be. So, if you consider the risk of freezing and the risk of overheating, you can understand the pattern of leaf sizes you see across the entire world.

Some decades ago, scientist realised that variability in leaf size was related to water and temperature. They proposed that the limit to leaf size was set by the risk of overheating. Thus, when rainfall is high, plants can get away with having larger leaves. New research, suggests this idea applies only in certain regions of the globe and that the overall limits to leaf size are much more set by the risk of freezing at night.

Opinion

It is one of many things I've never had think about: why leaves have their sizes. That's why I choose this article. Because like this, there are a lot of things in the universe I know that exist but I've never thought why they exist, or why they look like they are, or why they have that colour and all this kind of stuff. I find it interesting, because when I was reading the examples about places I realized that I have seen certain patterns in the size of leaves when I am in certain places, specially while travelling.

I could say that I agree with the article, I mean, I could say that what it says it's true because I have experienced it. They mention the variety of sizes that you can find in a small square and it is true, I have been surrounded by many different plants and all of them with different sizes on their leaves, without have to move long distances.

New Words

Whereby

¹ Briggs, H. (August 31, 2017). Clues to why Leaves come in many sizes. BBC News (Science and Environment). Taken from: http://www.bbc.com/news/science-environment-41099030