



PLANTS:

The ultimate survivors

Plants inhabited this planet pretty much as soon as Earth cooled down, as soon as the oceans formed, as soon as water was accessible. Since then, thousands of unique species have evolved and the world became one dominated by Flora. Out of the entire world's dry land, over 32% is covered with plants!

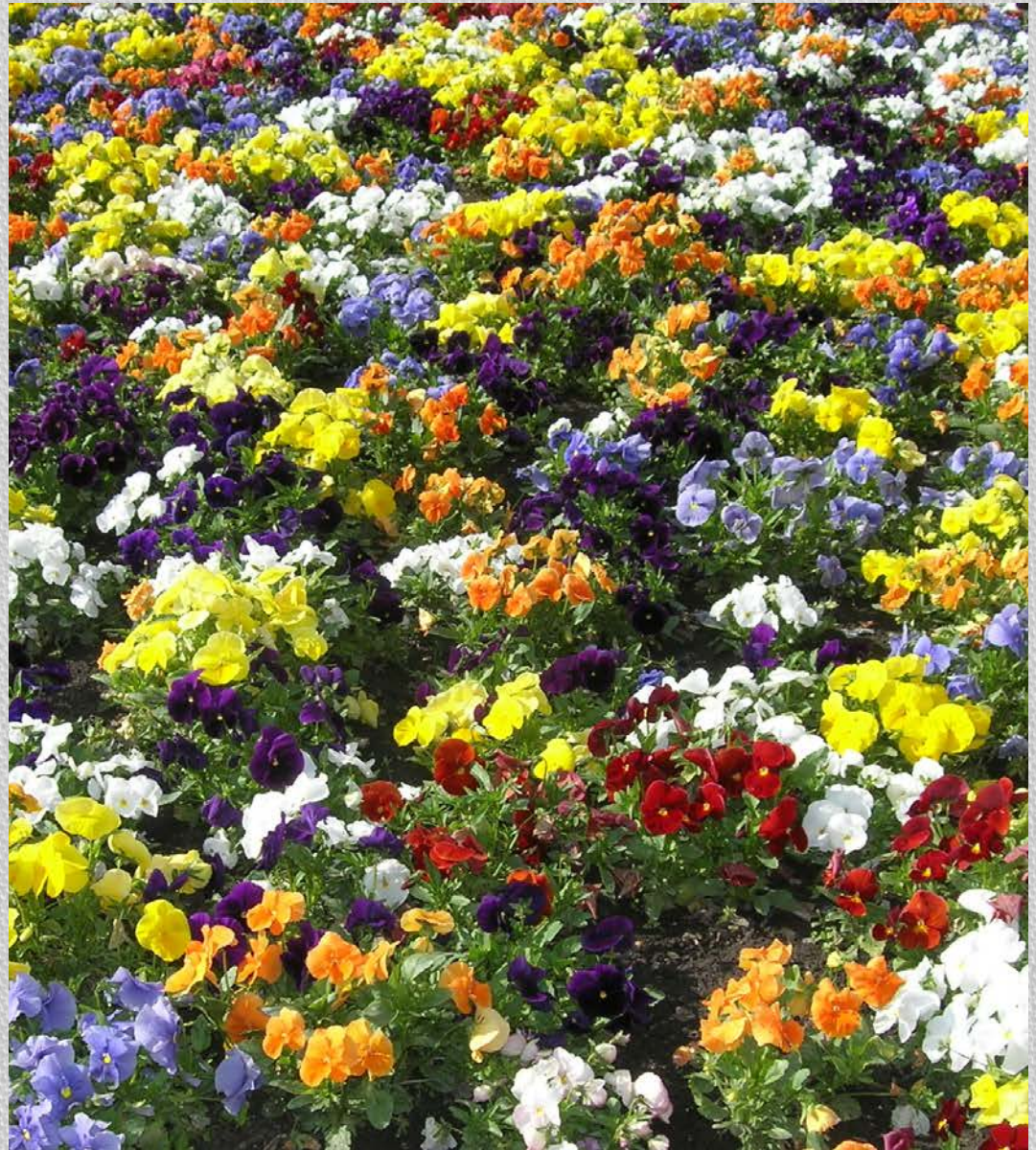
Therefore, the Plant kingdom (The other kingdoms of life are Animals, Protista, Fungi, Archaeobacteria, and Eubacteria) is today the second largest one after the Animals.





The one reason and key to a plant's success is efficiency. Instead of walking around and/or hunting to find food, which uses up valuable energy, plants get their nutrition by a reaction known as *photosynthesis*. In this, a plant uses the chlorophyll in its leaves to convert sunlight into usable energy. (In potential form) Then, it draws minerals and water up from the soil with its roots. When the minerals/water reacts with the stored energy, a natural sugar known as glucose (A.K.A. plant food) is formed. This is why fruit and even some stalks of plants taste sweet!

But first, in order for there to even be a plant, another, fully grown plant has to reproduce. One method this is achieved by is growing flowers, the males containing pollen and the females containing unfertilized seed pods. Then, an animal, the wind, or another natural force carries the pollen from a male flower to a female flower. When the seeds are fertilized, they mature and eventually, they have to get distributed. And that is when plants get creative.



This is a close-up of inside a tulip. Notice how the Filaments have pollen on them. In the case of tulips, the same flower has both male and female parts. The filaments are male, the stigma (center) is female.



When it comes to distribution of seeds, plants get creative. Some plants use wind to scatter their seeds, while others attach them to animal fur. Some drop their seeds into rivers and streams, and some even shoot them out of pressurized pods! These pinecones contain seeds, too!



As these seeds drop into the soil and sprout, new generations come alive – generations that will continue with this success story and produce new generations, still to come.

