**Earthquakes boost tree growth**

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* **What was your first thought when you heard the title of this article?**
My first thought when I heard the title of this article;
First of all, I didn't know that earthquakes could have a positive impact on life and the environment, especially after an earthquake, the most common and immediate proof is the observation of the damage and especially the most negative consequences as well as people's fear.
* **Explain how the researchers discovered that earthquakes could help trees grow.**
Scientists have discovered that following earthquakes, there may be an increase in tree growth caused by the availability of groundwater due to earthquakes.

Large earthquakes can increase the amount of water supply, raise the water table, and thus give plant roots better access to water in water-limited environments, researchers say.

Analysis of tree cores, taken from trees in the valley floor, showed that some of the trees in the valley experienced a temporary increase in growth after the earthquake, based on both evidence from the increase in surface light and the proportion of carbon isotopes in the cells. This provides a cellular level perspective on aspects of tree health, growth and water availability.
* **How does an earthquake affect the flow of water through valleys, soil and rivers?**
In mountain ranges, large earthquakes have the consequences of systematically triggering a large number of landslides, cracks, collapses, falling objects, explosions, fires, etc.

All of this is responsible for the introduction of massive volumes of sediment into the river system.
And The gradual removal of these sediments from the area
epicentral affects river dynamics.
* **Explain how an earthquake can help trees in the valleys grow while trees high on the ridgelines do not grow as a result of an earthquake?**
An earthquake promotes root water supply because large earthquakes can increase the amount of water supply flow, raise groundwater levels and thus give plant roots better access to water. water
Following the various analyzes carried out by researchers, they have made it possible to learn more about the health, growth, and water availability of trees.
The results revealed greater growth, especially on trees in the valley than on trees located high on the ridges.
* **Explain how this discovery could be used?**
According to scientists, earthquakes have a positive impact on tree growth.
Indeed, earthquakes would be the cause of an increase in groundwater, which would be favorable to the growth of trees.

According to the analyzes that have been made by scientists on the carrots having been extracted from trees located at the bottom of the valley, and others from the crests of the slopes of the hills. These analyzes showed a temporary increase in growth for the former, in the period following the earthquake; visible increase in different aspects such as health, growth and availability of water near trees.

And these results also show that new tools that can be used to study earthquakes:
Indeed, the post-seismic changes of the luminous surface as well as the isotopic ratios of carbon could be very useful.
These factors could not only be used to study tree growth, but also photosynthetic responses to earthquakes.
* **How could you benefit from this discovery?**
By conducting a study on earthquakes and post-seismic changes in the luminous surface, these factors would also serve me to study the growth of trees, but also the photosynthetic responses to earthquakes.
This tool would be a real plus for me, in order to be able to study current phenomena, but also those that have occurred in the past and so I could master the anatomy of wood.
* **What other positive benefit could you imagine from an earthquake? Do you think it has been researched?**
Although earthquakes are among the most frequent natural disasters on earth, and they represent a serious danger because they are generally unpredictable.
its only positive point is that an earthquake often only lasts a few seconds even if its consequences are considerable.