

Why are acid rains harmful?

Necessary materials and tools:

Potted plants (seedlings), strip sulfur, bunsen burner, match, jar

Description of experiment:

By burning the sulfur strip, it burns with light blue flame and pungent odor. Colorless gas is formed. It is the sulfur dioxide.

We need to make the experiment outside or in hood because of the sulfur dioxide has unpleasant odor. Avoid inhaling gas.

We place an experimental potted plant into a jar which containts sulfur dioxide gas.

Result:

The plant dies in a few hours, but not later than a day.

Explanation:

The sulfur dioxide is highly toxic to plants, mainly conifers react sensitively. Acid rain destroys the roots and foliage of trees. It also destroys the plants. The leaves of trees become yellow and wither.

The energy (coal, oil, natural gas) and fuel are burned to carbon dioxide and water along with other combustion products such as nitrogen and sulfur oxides are formed. The sulfur dioxide creates a sulphonic acid in the water, which is a component of acid rain.

One of the causes of deforestation is probably the high sulfur dioxide emitted by the smokestacks or power stations.