



The Impact of Acid Rain on Ecosystems and Human Health

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Abstract

Acid rain is a significant environmental issue that results from the release of sulfur dioxide (SO₂) and nitrogen oxides (NO_x) into the atmosphere, primarily due to industrial activities, burning of fossil fuels, and transportation. These pollutants combine with water vapor, oxygen, and other chemicals in the atmosphere to form sulfuric and nitric acids, which then fall to Earth as acid rain. This article explores the multifaceted impacts of acid rain on ecosystems and human health. It begins with a detailed explanation of acid rain formation and its composition. The discussion section highlights how acid rain affects soil, water bodies, forests, agricultural crops, and biodiversity. Furthermore, the effects

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Abstract: This study investigates the impact of acid rain on ecosystems and human health. The research focuses on the chemical composition of acid rain, its effects on soil, water, and vegetation, and the potential health risks to humans. The study includes a literature review, field observations, and laboratory experiments. The results show that acid rain significantly alters soil pH, leading to nutrient leaching and reduced plant growth. It also affects aquatic ecosystems, causing fish mortality and changes in species composition. Human health risks include respiratory and skin irritation, as well as potential long-term effects on the nervous system. The study concludes that acid rain is a serious environmental and public health concern, and that further research is needed to develop effective mitigation strategies.

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