

Effects of Acid Rain on Trees

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Abstract: Acid rain is a rain form or any other form of precipitation that present acidic and possesses elevated levels of hydrogen ions (low pH). Acid rain is caused by emissions of Sulfur Dioxide and Nitrogen Oxide, which react with the atmospheric water and water vapours to produce acids. Trees and soil are the prime receptor of acid deposition and function as sink. Monocotyledons plants are reported to be relatively less affected by acid rain as compared to dicotyledons plants and young rootlets, leaves and shoots are typically more sensitive to low pH conditions. It also effects the compositions of soil water which is the main medium of nutrient supply for the plants and soil microflora. Acid rain solutions make their entry into the leaf tissue through the cuticle and produce marked effects on tress. Acid rain generally retards the growth of trees by stimulating abnormalities in metabolism of the trees, like photosynthesis, nitrogen and sulphur metabolism, however, there are exceptional cases of promoting growth as well. Studies conducted globe on the exposure of various crop plants to acid rain and its ultimate effects on plant growth and reproduction and draws attention for development of plant types suited to acid rain affected lands.

Keywords: Acid rain, Air pollution, Development, Growth, Plants, Yield, Trees, Global, Water, Soil, etc.

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