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## **ENVIRONMENTAL POLLUTION AND ITS HARMFUL IMPACT ON VEGETAL SPECIES**

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### **Abstract**

The environmental abiotic and biotic factors have a significant impact on physiological and biochemical processes from vegetals. Especially, pollutants act like *stress factors* and alterate to a large extent the plant – soil system. Through a systematical study it may be evidenced vegetal species grown in the presence of pollutants and acting as *bioindicators*, *biomonitors* or *bioremediation agents*. There are very important aspects such as composition of growth media, nature, concentration and exposure period for pollutants, as well as physiology, vegetation stage and type of vegetal species. Alteration of soil properties (e.g. acidification), nutrients balance and mycorrhizal associations influence the biosynthesis processes through quantitative and / or qualitative variations of chemical components.

Some data regarding plants' growth and development in the presence of pollutants from different industrial activities (fuels burning, pulp and paper industry) are presented here. Biomass production and quantitative evolution of the biosynthesized chemical components (cellulose, lignin) and mineral elements may constitute sensitive environmental parameters, providing useful informations about *plant – pollutant – environment* interactions.

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