



## **Antimony contamination and its effect on Trifolium plants**

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Antimony is not an essential element and soil Sb contents usually are low. However, soil contamination by Sb has increased in the last years due to the human activities (combustion of fossil fuels, mining, waste incineration, smelting, shooting and road traffic). The main objective of this work was to study the effect of different concentrations of antimony ( $\text{KSb(OH)}_6$ ) in order to evaluate the effect on growth and Sb uptake on *Trifolium pratense* cv. *Milvus* and *Trifolium repens*. Our results show that Sb accumulated both in roots and shoots of clover without any negative effect on root growth, cellular viability and lipid peroxidation. This absence of toxicity symptoms in clover plants could be very dangerous because Sb can be inadvertently incorporated into the trophic chain causing toxic effects both in animals and humans. The absence of toxic effects on plants does not seem to be due to detoxification by phytochelatins because the use of the gamma-glutamylcysteine synthetase inhibitor, L-buthionine-[S,R]-sulphoximine (BSO) did not enhance Sb toxicity to plants.

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