

Response of *Artemisia herba alba* to hexavalent chromium pollution under arid and semi-arid conditions

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Description

The aim of this work is to study and evaluate in situ, the *Artemisia herba alba* responses to hexavalent chromium stress in the arid and semi-arid steppe Algerian soil. This metallic pollutant was selected to its high toxicity and to its great release from several industrial and agricultural activities emissions in the area of the study region. *Artemisia herba alba* is a medicinal plant but also a forage species widely used in pasture. It has dominated then adapted to the arid and semi-arid climate of Algerian steppe region, due principally to their morphological and physiological characteristics.

To establish this work, *A. herba alba* species were selected in the Algerian steppe region, and their soils were treated weekly with K_2CrO_4 solution for about three months. Chromium concentrations were determined in the soil and in the different plants' parts to verify its absorption and translocation with and without pollution simulation