

1. Record Nr.	UNINA9910572192503321
Autore	Decorosi Francesca
Titolo	Studio di ceppi batterici per il biorisanamento di suoli contaminati da Cr (VI) / / Francesca Decorosi
Pubbl/distr/stampa	Firenze, Italy : , : Firenze University Press, , 2010
Descrizione fisica	1 online resource (140 pages)
Disciplina	636.089
Soggetti	Veterinary medicine
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Chromium, in its hexavalent form [Cr(VI)], is a dangerous environmental pollutant. Bioremediation, which exploits the capacity of microorganisms to reduce Cr(VI) to Cr(III), is an interesting alternative to chemical-physical technologies for the rehabilitation of soil contaminated by Cr(VI). This study has made it possible to obtain a profound phenotypical characterisation of a number of bacterial strains capable of reducing and resisting Cr(VI), making it possible to identify various candidates that could potentially be employed in bioremediation. Moreover, a new gene involved in resistance to Cr(VI) has also been identified, the primary function of which consists in the induction of the cellular response to sulphur starvation. The study of this gene has highlighted that the sulphur content of the soils is one of the parameters that can influence the bioremediation of soils contaminated with Cr(VI).