

# Études expérimentales et théoriques de l'extrait de *Spergularia Rubra*(Sabline rouge) en tant qu'un inhibiteur vert de corrosion de l'acier au carbone X70 dans HCl 1M

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**Abstract:** The use of inhibitors is one of the most effective methods for protecting metals against corrosion. Nowadays, the development of non-toxic and biodegradable corrosion inhibitors is essential. Plant extracts have become important as an environmentally acceptable, readily available and usable source of inhibition for a wide range of corrosion prevention. The objective of this work is to study the inhibiting action of a plant substance ?*Spergularia Rubra*? , on the corrosion behavior of X 70 carbon steel widely used in the construction of pipelines, in 1M HCl, using different electrochemical techniques, namely impedance spectroscopy and Tafel method.

**Keywords :** acid corrosion, steel, inhibition, green inhibitor, *Spergularia rubra*