

Etude du pouvoir inhibiteur de l'extrait de la *Spargularia ruba*(sablina rouge) vis-à-vis de la corrosion de l'acier X70 dans une solution acide HCl 1M

LALLEM YAZID, AROUNI AHMED HOUSSEM

Soutenue en: 2019

Abstract: Some organic compounds are considered as effective inhibitors for the corrosion of steels in the acid medium, when they are added in low concentrations; they can reduce or stop the corrosion of the exposed metal. Their operating principle is based on the protection of the metal of its environment. In this work we were interested in the study of the effect of the *Spargularia ruba* extract on the corrosion of X70 steel in a molar solution of hydrochloric acid at 25 ° C. Inhibitory efficiency and mode of action were evaluated by both gravimetric and electrochemical methods. The results obtained showed that the efficiency exceeds 82% for a maximum concentration of 560 mg / L, and increases with immersion time at room temperature.

Keywords : acid corrosion, steel, inhibition, green inhibitor, *Spargularia ruba*