

## POTENTIODYNAMIC INVESTIGATION OF THE ANTICORROSIVE ACTION OF *COTULA CINERAE* EXTRACTS ON MILD STEEL X 52 IN 20 % H<sub>2</sub>SO<sub>4</sub> SOLUTION.

Abd-el-Kader BENMNINE<sup>(a)</sup>, Mohamed Rida OUAHRANI<sup>(a)</sup>, Nourdine GHERRAF<sup>(a)</sup>,  
Lotfi BAAMEUR<sup>(b)</sup> and Lamine Skrifa<sup>(b)</sup>.

<sup>(a, b)</sup> Laboratory of valorization and promotion of Sahara resources (VPRS), University Kasdi Merbah, BP511 Ouargla (Algeria).

### ABSTRACT:

The effect of *Cotula cinerae* extract on the corrosion rates of mild steel X52 in 20% H<sub>2</sub>SO<sub>4</sub> solution has been elucidated at 25 C° by potentiodynamic polarization method. The maximum inhibition efficiency (% $\eta_{\text{Pol}}$ ) was about 95 %. As far as we know, the anticorrosive behavior of this plant has never been undertaken in literature.

**KEY WORD:** mild Steel, *Cotula cinerae*, corrosion inhibitors, Tafel plots.