INHIBITION EFFECT OF SOME PLANT EXTRACTS ON THE CORROSION OF MILD STEEL IN H₂SO₄ MEDIUM

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The inhibitive effect of extracts of *Euphorbia guyoniana* on the corrosion of X52 mild steel in aqueous15% sulfuric acid was investigated. Weight-loss determinations and electrochemical measurements were performed. Polarization curves indicated that the plant extracts behave as mixed- type inhibitors. The corrosion rates of steel and the inhibition efficiencies of the extracts were calculated. The results reveal that the extract solutions of the plants could serve as effective inhibitors

for the corrosion of steel in sulphuric acid media. Inhibition rate was found to increase with increasing concentration of the plants extract up to an optimum concentration.

Key words: plant extract, euphorbia, corrosion inhibition, acidic media

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