



Inhibition Study of Caesalpinia Crista on Corrosion of Mild Steel in Sulphuric acid

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ABSTRACT

The inhibition effect of Caesalpinia crista (Kachko) fruit on corrosion of mild steel in sulfuric acid using weight loss measurements and electrochemical techniques has been reported in this study. The inhibition efficiency of Caesalpinia crista was found to vary with concentration, temperature and immersion time. Good inhibition efficiency I.E. % was recorded in acid solution. The adsorption study of these compounds on mild steel surface found to obey Temkin's adsorption isotherm. The activation energy values and values of free energy of adsorption indicated physical adsorption on mild steel surface. The Potentiodynamic polarization results showed that the compound studied was mixed type inhibitor.

Keywords: Mild steel, Caesalpinia crista, corrosion, inhibition effect, sulfuric acid, adsorption.
