EKSTRAK BIJI KUINI (*Mangifera odorata* Griff) SEBAGAI INHIBITOR KOROSI BAJA DALAM MEDIUM ASAM KLORIDA

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ABSTRACK

KUINI'SEED EXTRACT (*Mangifera odorata* Griff) AS COROSION INHIBITOR OF STEEL IN HYDROCHLORIC ACID MEDIUM

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Kuini'seed (*Mangifera odorata* Griff) is a plant that is rich in secondary metabolites and potentially as a corrosion inhibitor in acidic medium. This study was conducted to identify the corrosion inhibition efficiency possessed by the kuini'seed extract and determine the type of corrosion inhibitor of kuini'seed extract with weight loss method, potentiodynamic polarization method and analysis of *scanning electron microscopy* (SEM). Based on the weight loss method known value of the highest inhibtion efficiency at the extract concentration of 8 g/L at 91,78 %. Increased temperatures result in decreased inhibition efficiency. Potentiodynamic polarization measurements showed a kuini'seed extract is a type of anodic inhibitor. Extract adsorption on the steel surface follow the pattern of Langmuir adsorption isotherm. SEM analysis shows that there are differences in the morphology of the surface of steel, which is immersed in acid medium with and without the addition of a kuini'seed extract.

Keywords : *Mangifera odorata* Griff, Corrosion inhibitor, *Weight loss,* Potentiodynamic polarization, SEM