

**EFFICIENCY STUDY OF ORGANIC INHIBITORS FROM KAPUK  
MISTLETOE (*Dendrophthoe pentandra*) LEAF EXTRACTS with SS41  
STEEL IN 3.5% NaCl ELECTTROLYTE**

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**ABSTRACT**

Every iron will be damaged or degraded by the corrosion process, therefore to reduction of an corrosion process on an iron must be done, one method of preventing corrosion is a corrosion inhibitor, a corrosion inhibitor is a substance that when added to the environment on small number can reduce the corrosion rate of a metal in a corrosive environment, however, most of the corrosion inhibitors are inorganic inhibitors which are not environmentally friendly, therefore in this theses ,we research on how to make organic inhibitors using Kapok mistletoe (*Dendrophthoe Pentandra*) , this parasite is the most common parasite found in Indonesia but is not widely used other than as an ingredient in medicines, However, from previous studies it was known that the leaves of kapok mistletoe(*Dendrophthoe Pentandra*) contain lots of antioxidants and have imidazole compounds so that they have the potential to be used as organic corrosion inhibitors. The effectiveness of the inhibitor was calculated by weight loss and tafel polarization methods. Experiments were carried out in concentrations of parasite leaf extract 0 ppm, 100 ppm, 200 ppm, and 300 ppm with immersion time of 1 day, 7 days and 8 days. The metal used in this experiment is JIS SS41 steel which is applied as a pipe and ship plate with a corrosive environment such as sea water

**Keywords :** Corrosion, *Dendrophthoe Pentandra*,inhibitor