**ABSTRACT**

Metal corrosion is an electrochemical reaction between the environment and a metal, in which microbes are thought to play a very important role. These microorganisms do not only cause corrosion, but they can also inhibit or protect against corrosion. Fungi are the most dessicant–resistant microorganisms and are ubiquitous in atmospheric environments. About five fungal organisms were isolated using Starkey media from the soil of corroded pipeline tank. The influence of these fungal isolates on both rusted and non–rusted mild steel plates were studied for a period of 25 days. Among the five fungal isolates, Non–rusted Isolate (NR)–1 and Rusted Isolate (R)–3 showed minimum corrosion reaction on mild steel plates, based on the results of weight loss and dissolved iron content. The results revealed that the two isolates showed minimum rate of corrosion on mild steel plates due to the passive mechanism of …