




The anti-corrosion performance of chaya leaf extracts on pure Mg substrates in Ringer's solution

Leonardo Hernández^a, Viviana Roche-Llerena^a, Geonel Rodríguez-Gattorno^a, Pedro Castro-Borges^a, Adolfo López-Torres^b, María A. Fernández-Herrera^a 

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Highlights

- Green corrosion inhibitors were extracted from Chaya leaves.
- Chaya leaf extracts inhibit the corrosion of pure Mg in Ringer's solution.
- The Chaya extract in ethyl acetate exhibited 92.9% of inhibition.
- XPS confirmed the adsorption of organic components on the surfaces.
- All three extracts efficiently regulate the local pH.

Abstract

The chaya (*Cnidoscolus aconitifolius*) is a green, leafy vegetable domesticated since ancient Mayan culture, offering an abundance of valuable metabolites. This study investigated how three different