Abstract

Structure and dynamics of the mangrove forest in the Ranchería river delta, Colombian Caribbean. We registered seedling survival and biomass increase for Rhizophora mangle L., Avicennia germinans L. and Laguncularia racemosa (L.) Gaertn. f., main mangrove species in the Rancheria River delta, Colombia. Only seedlings of R. mangle were found to survive. We also measured maximum rate of litterfall. We estimated annual litterfall through interpolation within an exponential regression performed with maximum and annual litterfall data published in other sources; the value of annual litterfall for the area was estimated to be 12.9 mg ha⁻¹ y⁻¹. We found a 7.4 mg ha⁻¹ y⁻¹ increase in biomass. Litterfall constitutes the larger fraction of the 20.2 mg ha⁻¹ y⁻¹ productivity of this mangrove. We believe this is a very high value for a forest under unfavorable natural and human conditions, such as high seasonality and continuous use of the forest to feed goats and sheep. We consider that the high productivity is a response to both natural and anthropogenic stress. Rev. Biol. Trop. 55 (1): 11-21. Epub 2007 March. 31.

Keywords

mangrove, litterfall, growth, survival, productivity.