



# Mangroves of southwestern Madagascar : a complex dynamic during the last 70 years under natural and anthropogenic control

Submitted by Aude Nuscia Taibi on Wed, 12/14/2016 - 19:03

Titre	Mangroves of southwestern Madagascar : a complex dynamic during the last 70 years under natural and anthropogenic control
Type de publication	Présentation
Type	Poster
Année	2016
Langue	Anglais
Date	29-08/01-09/2016
Auteur	Andriatsiaroandroy Onjanamboara, Ricardo [1], Taïbi, Aude Nuscia [2], Rejo-Fienena, F. [3], Ballouche, Aziz [4]
Pays	France
Ville	Montpellier
Mots-clés	Dynamic [5], Mangrove [6], Remote sensing [7], southwest madagascar [8]  The semi-arid southwestern Madagascan region is characterized by mangroves part of the Indo-Pacific phytochorie domain, providing numerous ecological, economical, social and cultural functions and values. These mangroves are under great anthropogenic pressures (salt production, shrimp farming, wood collection ...), enhanced by climate change driving a catena of changes of the three rivers (Onilahy, Fiherenana and Manombo) hydrological and sedimentological functioning and of the coastal dunes of the region. The recent changes of mangroves are often only considered as degradation phenomena, ignoring the resilience capacity of these environments and of the socio-economic and cultural component in the associated landscape construction. In order to assess the much more complex contemporary dynamics and recent evolution of mangrove ecosystems and coastal dunes, we have used a retrospective diachronic aerial photography (1949) and satellite images (SPOT dated 1987 and 2014) processing of 5 different mangrove sites of the region of Toliara. This remote sensing monitoring have been combined with field surveys (2013 and 2014) consisting of transects for floristic identification ( <i>Avicennia marina</i> , <i>Sonneratia alba</i> , <i>Lumnitzera racemosa</i> , <i>Bruguiera gymnorhiza</i> , <i>Ceriops tagal</i> , <i>Rhizophora mucronata</i> , <i>Xylocarpus granatum</i> ), trunk diameter measures at Breast Height (DBH), counting of dead feet, cut trees and juveniles, complemented with the characterization of the environment (hydrography, soil, anthropization ...). The results reveal contrasted evolutions of the mangrove communities of Toliara region between development (Manombo-Fitsitike and Toliara I), stability (Mouth of the Onilahy) and regression (Ambondrolava and Ankiembe), related to a complex combination of anthropogenic (cutting pressure, clearing, reforestation ...) and natural (silt, sedimentary accretion ...) factors.
Résumé en anglais	<p>URL de la notice</p> <p><a href="http://okina.univ-angers.fr/publications/ua15352">http://okina.univ-angers.fr/publications/ua15352</a> [9]</p>

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