

# 6<sup>th</sup> International Conference on BIODIVERSITY AND CONSERVATION

April 27-28, 2017 Dubai, UAE

## Floristic composition analysis in the natural Wax Palm reserve, La Vega (Cundinamarca, Colombia)

Díaz-Puerto Zarick Juliana

Universidad Distrital Francisco José De Caldas, Colombia

In Colombia, diversity loss has appeared for different anthropic activities. Due to the actions of different persons and entities, a restoration process has been conducted in the natural Wax Palm reserve located in the town of San Antonio, La Vega, Cundinamarca. In this way, the present study defines the conservation state of the reserve, identifying the existing vegetation units from estimations of the basal area, coverage and dominance, to subsequently perform a taxonomic identification, analyzing ecological alpha diversity indexes (species richness) and establishing the relations between the environmental conditions and the characteristics of floristic vegetation composition. 4 plots of 10x10 m were established, where they were registered and gathered botanical samples of all the individuals with a circumference at breast height (CBH)>10 cm; for a later taxonomic identification in the forest herbarium of the District University Francisco José de Caldas of the vegetable material gathered in the field. Also, a floristic and structural analysis of the vegetation was performed, by means of the calculation of alpha diversity indexes: Importance Value Index (IVI), Margalef's Index (Dmg), Simpson's index, Menhinick's (Dmn), Shannon-weaver's Index and Brillouin's Index. In the sampling of 400 m<sup>2</sup> (0, 04 hectares) were found 8 families of vascular plants, where 9 species were identified. The family with the most species was *Vismia* (5), the species with the most individuals was *Guarea glabra* (4). It is estimated that 8 out of 9 species are endemic, being the majority of them deciduous, which is concordant with the moist forest ecosystem; where the reservation is located. Overall, as shown in Figure 1 and 2, big diversity and little dominance are present in the field of study, which is related to a restoration process in the natural reserve.

### Biography

Díaz-Puerto Zarick Juliana is currently pursuing the last semester of Environmental Engineering at the District University Francisco José de Caldas (UDFJC) in Bogotá, Colombia. Through different researches, she found her passion in the conservation of the nonrenewable natural resources, and with the application of appropriate technologies identified a sustainable approach in electrical energy generation by means of offshore wind farms. She has carried out research on Electrical Transmission Lines at the Engineering Institute of the National Autonomous University of Mexico (UNAM) and published her research results at the 28<sup>th</sup> International Power Summer Meeting, also participated as a Speaker at the 2<sup>nd</sup> Inter-American Conference Climate Change in 2016 with the theme "Current panorama of Mexico's participation in the carbon market".

Zjdiazp@correo.udistrital.edu.co

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