

ABSTRACT

This study identified the area impacted by oil spill, explosion, and fire; and assessed the effect of the vandalization of oil pipeline on the vegetation in Ilado area of Lagos State of Nigeria. The study reveals that *Rhizophora mangle* (38.5 %) and *Cocos nucifera* (22.2 %) were the dominant woody plant species in the area while *Rhizophora mangle* (23.0 %) and *Phoenix spp* (26.6 %) were dominant in the control quadrat. The girth size-class distribution of woody plants species did not conform to the inverted J-curve structure characteristic of stable vegetation. *Oryza longistaminata* was the most abundant species with 38.5 % in the nine affected quadrats and *Pennisetum purpureum* with 32.8 % in the control. Species diversity index revealed that the control quadrat had a species diversity of 0.68 while that of the nine affected quadrats had the species diversity of 0.37. It was concluded that oil spill from vandalization and the resultant fire resulted in the reduction of mangrove vegetation and changes in its species composition and distribution.

Keywords: Mangrove Vegetation; Quadrats; Species diversity, Species Distribution; Oil Spill