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Phytosociological studies of Citrullus colocyanthis L., Growing in different altitudinal sites in Saudi Arabia

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Abstract

The aim of the present study was to survey and record the plant species associated with Citrullus colocynthis in different altitudinal localities in the West of Saudi Arabia. Depending on the presence of Citrullus colocynlhis L. species, seven stands on the West of Saudi Arabia; expending from 25 m up to 2220 m a.s.l. height and 330 km long were selected for this study. Soil samples were collected from the studied localities and the soil properties were investigated. Also, plant species associated with C. colocynthis were collected, recorded and prepared as herbarium specimens. The studied localities were represented by different ecological, geographical and edaphic sites. A list of 127 species belonging to 41 families present in all locations was recorded. Calotropis procera was the representative species with C. colocynlhis in all localities. The percentage of presence of the associated species were different between species in each location and also from location to other. Three different ecological areas could be distinguished in the study area. The area near the red sea characterized by salty sandy soil and low vegetation represented the first area. The second one was the coastal plain and West slope which characterized by low rainfall and xerophytic plants. The third one was the mountainous area which characterized by high altitude, more rainfall and high density of vegetation. © 2009 Asian Network for Scientific Information.

Author Keywords

Citrullus colocyanthis; Geographical areas; Phytosociological; Plant list

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