Phytosociology of wadi system west of Qusseir province

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Abstract:

Twelve wadis proliferate in the area surveyed drain this part of the Red Sea mountains into the Sea at Qusseir province. Phytosociological study of these wadis is based on the analysis of 55 stands using the Zuurich-Montpellier technique. The vegetation survey revealed the prevalence of perennials in this area. Two distinct community types are recognized in the stands studied in the investigated wadis, each of which seems to have its own ecological characteristics especially concerning the water factor. The community type dominated by Capparis decidua and Tamarix nilotica covering the deltaic areas and the end parts of the wadis traversing the inland basement complex country. Some members of this community type are halophytic plants. The other community type dominated by Pulicaria undulata and Pulicaria crispa was found inhabiting most of the wadis courses especially the high localities. Members of this community type reflect the prevailing xerophytic conditions. Elements of the alliance Zygophyllaeion coccini previously recognized in other wadis of this desert are well represented in these wadis. Within the area surveyed, the individuals of most species covered in this study exhibit a wide range of variation in size and vitality. These differences are related mainly to differences in water resources.

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