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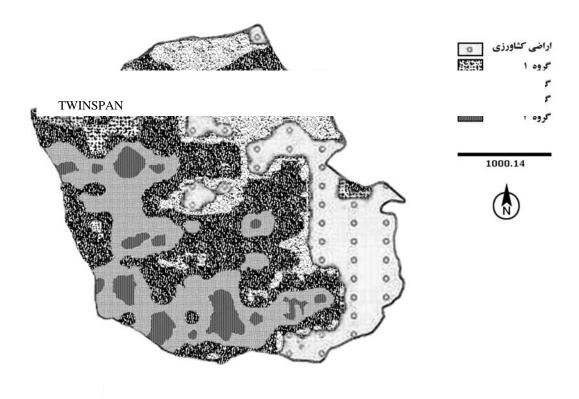
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## Site Classifing Using Plant Cover Analysis in Oak Coppice Forests of Marivan (Case study, Doveyse Forest)

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## **Abstract**

In this research, site classification using vegetation composition was carried out for the first time in Zagros forests in western Iran. the research was performed in a section of northern-east forests of Marivan City (Doveyse forest). The study area covered 724 hectares and main tree species in Doveyse forest are oaks including: Oak manna tree (Quercus persica), Gall oak (Quercus infectoria) and Lebanon tree (Quercus libani).

At first, releve area was determined using minimal area method (a square of 20 ×20m sides). Then according to approximate distribution pattern of plants, a systematic random rectangular grid was designed with sides of 150 × 300m.Releves were placed in the corners of this grid. A total of 103 releves were located in the forest. Plants in the releves were collected, identified and their abundance noted using corrected Braun-Blanquet table. An overall 137 plant species (16 woody and 121 herbaceous species) were identified.

Using TWINSPAN software data (Plant frequencies) were analyzed in two sections namely woody species and herbaceous ones. The site was classified into 4 units according to woody species analysis but this classification was not accepted because the Eigen values of separated classes were low. Herbaceous plant analysis was carried out in 7 stages with site being classified into 4 homogenous units, too. Similarity among units was verified through Sorenson Index and confirmed which lead to the classification being accepted. Finally the map of homogenous units was drawn using Arc-info and Idrisi softwares.

Keywords: Ecological group, Marivan, Oak, Releve, Site, Sorenson, TWINSPAN

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