

Abstract:

This study has addressed the problem of the deterioration in plant biodiversity in Um-Safa and Jibya Forests which are located within Palestine's central mountains chain and within the Mediterranean environment. The study period was from September 2011 to December 2012. Furthermore, the study has addressed the types of plants existed in the study areas as well as their expansion nature, and it also aimed at recognizing the availability of several significant plant types within the study area, as well as connecting between the availability of plant types and the natural factors and conditions which are represented in climate change and soil. Moreover, the study has also linked between plant types and the human factors and conditions which are represented in logging, overgrazing, early grazing, fires, cutting medicinal plants, as well as the Israeli occupation and land ownership.

The study has compared between some findings with regards to the study areas which are Um-Safa and Jibya forests. It has concluded that there are 104 types of plants belonging to 36 plant families. Braun-Blanquet's method was used for collecting and analyzing samples according to the plant availability scale and with reference to Abu-Samour's study (2005) on the manner of using differential analysis in extracting the availability rates which addressed the vegetation in Jordan, as 20 samples (10 m × 10 m) were taken for study area. In addition, Ronkier's method was used for recognizing plant density ratio of the available plants types, using squares of 100m × 100 m as well as taking longitudinal sections for conducting a comprehensive survey of the study area for the purpose of preparing a list of available plant types according

to their common Arabic names and the scientific (Latin) names aiming at providing a guide to include the names of the available plant types.

The study aimed at realizing the reality of plant biodiversity in the study area, introducing the main trees, shrubs, and grasses growing in the area, recognizing the endangered and rare types of plants, as well as clarifying the condition of plants and the impact of human and natural factors on them. For example, it has been noted that there is a great deterioration in some genuine plant types in the study area such as spiny hawthorn, as well as the variance in the availability of plant types between each of Um-Safa and Jibya forests which is due to natural and human factors which played a significant role in the availability and expansion of such plant types.

The study has revealed that the reasons for the existence of plant biodiversity vary between Um-Safa and Jibya forests. The plant biodiversity in Um-Safa forest refers to the fact that the area is a nature reserve; whereas the plant biodiversity in Jibya forest is resulted from the deterioration in the agricultural areas and the spread of natural plant types on the account of the cultivated types.

The study indicated that Um-Safa and Jibya forests actually encounter a decline in the plant biodiversity due to the lack of plant types in such areas, which the study has found, in comparison with the number of plant types in the West Bank at large according to the previous studies. Therefore, attention should be paid to this danger affecting the forests within the study area and in Palestine in general.