THE WOODY TAXA IN THE DIFFERENT RISK CATEGORY IN TURKISH FORESTRY AND CONSERVATION PRACTICES

Ayan, Sezgin; Sivacioğlu, Ahmet; Yiğit, Nurcan; Çelik, Durmuş Ali; Şevik, Hakan; Öztürk, Sevgi

Thema: 1. Forests and biodiversity

Subtheme: 1.5 Management for the conservation of forests

Abstract of the paper: Turkey, falls within the temperate region, is an important country with respect to plant biodiversity with 12000 taxa. Also, the endemic plant rate is above 30% in Turkey, and this enhance the importance of Turkey in plant biodiversity. Turkey is the only country which is in relation with 3 continentals and it has 2 gene centrums of the world. But, as all over the world, climate change and biodiversity degradation are the main enviromental problems. Nowadays, some of these taxa, which were under stress because of ignoring the importance of them, are taken into consideration in the silvicultural and gene conservation practices. The object of this study is to present offers related with the future of these taxa. In this study, as to the list of Red Data Book of Turkish Plants prepared with respect to IUCN endangering category, woody taxa which are into the pure and mixed forest structure in Turkey, were investigated. According to the mentioned list, 40 of endemic and 24 of non-endemic taxa which are naturally distributed in the forest areas of Turkey, were determined. 13, 12, 12 and 3 of endemic ones were classified as Vulnerable (VU), Lower Risk (LR), Endangered (EN) and Critically (CR), respectively. Also, 21, 2 and 1 of non-endemic ones were classified as Vulnerable, Data Deficient and Endangered, respectively. . Currently, among 64 of taxa existed,only for Abies cilicica, A. nordmanniana subsp. bornmulleriana, A. nordmanniana subsp. equi-trojani and Juniperus sp. in-situ conservation precauations such as, seed stands and gene conservation forest have been applied.Also, for Pinus halepensis in-situ and ex-situ conservation precauations such as, seed stands and seed orchards,were implemented by Turkish foresters.Despite of the fact that there are 37 of broadleaved taxa in the list of endemic taxa and 20 of broadleaved taxa in the list of non-endemic but rare taxa, only for Liguidambar orientalis, Alnus glutinosa, Quercus sp., Fraxinus sp. and Acer sp. taxa, gene conservation forests and seed stands were assigned. Additionally, Sorbus sp. and Phoenix theophrasti taxa has only gene conservation forests. Both conifer and broadleaved species, in-situ and ex-situ conservation practices are not satisfying in Turkey. Especially, special effort should be given for protection of 49 taxa from VU, EN and CR category. Moreover, for ex-situ conservation of these taxa, some conservation tools as clone banks, gene banks and seed plantation should be used in the favorable regions.

Email: sezginayan@kastamonu.edu.tr, asivacioglu@kastamonu.edu.tr, nyigit@kastamonu.edu.tr,

dcelik@kastamonu.edu.tr, hsevik@kastamonu.edu.tr, sozturk@kastamonu.edu.tr