

Determination of Flora on Lava Columns in Bartın-Güzcelcehisar Region in Turkey

Zafer KAYA¹, Barbaros YAMAN¹, H. Barış ÖZEL²

¹Department of Forest Botany, Bartın University, Faculty of Forestry, Turkey

²Department of Silviculture, Bartın University, Faculty of Forestry, Turkey
zkaya23@hotmail.com

Aim of the study: The lava columns have special site conditions for plants in terms of the main material of the soil. In this context, the aim of this study is to determine the flora of herbaceous and woody species living on lava columns.

Material and Methods: Study field was visited twice a month between 2015 and 2017. After routine herbarium process for plant samples collected, they have been protected in the Herbarium of Bartın University, Faculty of Forestry. The species were identified using the Flora of Turkey written by Davis and The Plant List. The GPS records and photos of the samples were taken as well. In addition, 12 sample plots, 1000 square meters, were taken in the lava columns to determine the silvicultural stand characteristics and the name of tree species.

Results: According to the results obtained from the observations made on the research area which is Güzcelcehisar province, annual and perennial herbaceous and woody plant species which are quite different from each other in their life forms and forest tree species such as oriental beech (*Fagus orientalis* Lipsky.), wild cherry (*Prunus avium* L.), European hornbeam (*Carpinus betulus* L.), pedunculate oak (*Quercus robur* L.), sessile oak (*Quercus petraea* (Matt.) Liebl.) and black pine (*Pinus nigra* Arnold.) have been determined. In the flora, some Mediterranean plant species are also present as well as European-Siberian ones.

Keywords: Lava columns, Flora, Güzcelcehisar, Forest Stand Characteristics, Turkey.