

Recognition of Endemic Plants in Zagros Region (Case Study: Lorestan Province, Iran)

Kambiz Abrari Vajari^{1}, Gholamhassan Veiskarami², Farideh Attar²*

1 -Department of Forestry, Lorestan University, IRAN

2 - Science Faculty, Tehran University, IRAN

* Corresponding author: kambiz_abrari2003@yahoo.com

Abstract. The present study was carried out in the Hashtadpahlou and Sefidkoh mountains which are important vegetation regions in the western Iran, Lorestan. The endemic plants and their life form in these mountain regions were determined. From the view point of regional elements, plants of these regions belong to Irano-Turanian region. Totally, 86 endemic plants from 18 families were recognized. The results show that the important families are Asteraceae (20 species), Fabaceae (14 species), Lamiaceae (13 species). The highest number of species investigated for *Astragalus* genus (11 species). Life forms of the plant species of region include: geophytes 26.44%, therophytes 16.09%, hemicryptophytes 18.38%, chamaephytes 31.04%, phanerophytes 8.08%. The high frequency of chamaephytes and geophytes can be attributed to high altitude and cold climate. Generally, it can be declared that the habitats of these ecosystems have high diversity due to the presence of 87 endemic plants and this pattern resulted from climate conditions and geomorphology of territory.

Keywords: Endemic plants, Life form, Irano-Turanian, Zagros, Iran.

Introduction

Biological variation of plant species are important in plant ecological studies (MAHMOUDI, 2007) and what enhanced today the increasing importance of biological diversity is its role in maintaining the stability of ecosystems (ESMAELZADEH & HOSSEINI, 2006). The composition of plant and animal in a given region is important for natural resources management (AKSOY & UZUN, 2011) and more accurate recognition plant and animal species provides suitable approach for better protection of ecosystems. Overpopulation, pollution, soil erosion, forest harvesting operation and other incorrect utilization of natural resources have caused many problems in the environment. To preserve these resources, one essentially uses the plants

properly and to achieve this important matter, one should be aware of flora and its relationship with the environment. Endemic species are those plants that distribution is restricted only to a particular region (ANDERSON, 1994; BULUT & YILMAZ, 2010). In recent years, awareness of the importance and role in relation to endemic species in conservation planning has been rising (SLATYER, 2007). In general, studies of these plants are useful for :1) knowing vegetation in the past; 2) determining the relationship of taxonomy; 3) identifying floristic area; 4) determining the optimum planning the protected parts, and 5) prioritizing strategies for protection (DHAR, 2002). Each plant has the unique ecological range and can tolerate a certain rate of variation of environmental conditions (ZAREI & ASSADI, 2008).