DETERMINING ALL POPULATIONS OF THE TROJAN SNOWDROP (GALANTHUS TROJANUS A.P. DAVIS & ÖZHATAY) IN THE ÇANAKKALE PROVINCE AND ITS IUCN THREAT STATUS

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ABSTRACT

The Trojan Snowdrop (*Galanthus trojanus* A.P. Davis & Özhatay), a bulbous plant with elegant flowers, belongs to the Amaryllidaceae family. A locally endemic species, it is in the Critically Endangered (CR) category according to the IUCN threat criteria, and in the Annex-II list according to the CITES Convention. The plant is only found in Çanakkale. Prior to this study, it had been observed in only two locations at altitudes between 400-600 m. Furthermore, Yüzbaşıoğlu (2010), in his doctoral thesis study, reported that almost half of one of the two known locations of *G. trojanus* was destroyed during the road widening work. This study aims to determine all habitats of the *G. trojanus* species within the borders of the Çanakkale Province using field studies. Also, it aims to update the literature data on the distribution areas and current conditions of the species in field studies, determine the population status of the species, and monitor the habitats and dynamic structure of the species with the indicators to be determined. Within the scope of the research, field studies were carried out within the borders of the Çanakkale Province in 2018 in order to determine the current populations of the species, which were previously reported at two locations at altitudes of 400-600 m, and as a result, it was determined that the species was distributed in six different polygons varying between 250-800 m in altitude. Based on these findings, the Extent of Occurrence (EOO) of the species was calculated as approximately 50 km2 (less than 100 km2) and its Area of Occupancy (AOO) as approximately 0.093 km2 (less than 10 km2). In the homogeneous sample plots taken in the polygons, the number of individuals per square meter of the species was measured and a total of approximately 950-1320 individuals were determined in six polygons. In 2019 and 2020, observations made on populations in various field studies showed that the current situation [JET1] was preserved. Based on these findings, it is recommended that *G. trojanus* "CR (Critically Endangered)" according to IUCN (2012) criteria. The Trojan Snowdrop is a sensitive species with a very limited distribution and its habitats are vulnerable to anthropogenic effects. Therefore, this species is at risk of extinction. As a result of the literature and field studies, the most important factor threatening the species and its habitats was determined as the road / expansion work (threat level: critical). Other threats are; mining activities (threat level: high), grazing activities (threat level: medium), and deforestation (threat level: unknown). Counter measures and monitoring plans against these threats have been proposed. This study was carried out within the scope of the "The Trojan Snowdrop (Galanthus trojanus A.P. Davis & Özhatay) Species Action Plan" project of the Ministry of Agriculture and Forestry, Nature Conservation and National Parks Çanakkale Provincial Directorate. We would like to thank the management and employees of the institution for their close attention and assistance throughout the study.
Keywords: Galanthus trojanus, Trojan Snowdrop, endemic, Çanakkale, Turkey, IUCN