

Terrestrial Flora Survey Methodology

In line with the comments in the Gap Analysis Report of Ramboll, this additional flora survey has been planned. Along the proposed route of the Mersin-Adana-Gaziantep (MAG) High Standard Train Project, an impact zone of 500 m wide on each side of the centerline of the route (Invasive species detected in the flora studies to be carried out 500 m to the right and left of the area where the line passes on the project route will be evaluated separately and measures to prevent the spread of invasive species will be proposed and all relevant structures and areas will be covered) will be considered and the work will be carried out within the borders of this corridor.

EUNIS Codes of Habitats

Identification of habitats and EUNIS codes (In the field work to be done, critical habitats will be defined according to the presence of plant species with hazard categories CR and EN, and critical habitats will be shown on the map) of these habitats will be completed. In this regard, EUNIS 2004 codes will be used to define the EUNIS codes of habitats. If the EUNIS codes cannot be defined in the lower scale, the definition will be made in the upper scale. EUNIS codes will be mapped along the route and EUNIS code map will be developed.

Distribution Maps of Endemic Plants

Information on the distribution of endemic plant species in Turkey, their preferred altitude and preferred habitat and flowering periods will be obtained from "Flora of Turkey East Aegean Turkey" Volume 1-11. The distribution of the species in Turkey (<https://bizimbitkiler.org.tr/yeni/demos/technical/>) will be used.

Critical habitats that may be on the MAG Project route between Mersin and Gaziantep will be defined and the points to be considered in these habitats will be revealed. Additional flora studies should definitely be carried out in spring (April-July) in 2022.

Before starting the construction works on the Project route between Mersin and Gaziantep, the working methods on how to work in the defined critical habitats will be aimed at preventing the species from being completely damaged. If the species to be protected is in the working corridor of the route (The railway line at the project site was determined by the engineers and the route was clarified. In case critical habitats are identified on the route in the surveys to be carried out, ex-situ protection measures will be proposed for the detected flora species (moving the species out of the construction corridor, moving to similar habitats) and monitoring. In case such a habitat is identified, its methodology will be presented in detail.), ex-situ protection method (i.e., transportation, seed collection and monitoring) will be recommended. If it remains within the boundaries of the impact area and is not directly affected by the activity, in-situ protection (i.e., habitat protection and monitoring where it exists) will be recommended. A critical habitat map will be created by processing the locations of the areas defined as critical habitats on the map.

The mapping work will be carried out by taking the coordinates of the points where the endemic plant species identified in the biodiversity study carried out within the scope of the MAG Project are determined in the project area.

In the field study to be carried out along the line (This survey will be done by a flora expert who is specialised in field studies along linear development projects, experienced in plant identification in the field and has done many similar studies before), the coordinates of the habitats will be taken, these habitats will be processed on the EUNIS codes, and the EUNIS habitat code map will be created.

The EUNIS habitat codes of these areas, the presence of endemic and endangered plant species in the areas will be investigated and it will be investigated whether these areas can be critical habitats by carrying out studies in the quarries, waste material storage areas and stations where materials are planned to be taken within the scope of the project.

Critical habitat assessment's methodology is provided in another document.