

The Studies in Turkey on Use of *in vitro* Cultures in the Conservation of BiodiversityYonca SURGUN ACAR¹, Betül BÜRÜN²¹Department of Molecular Biology and Genetics/Science Faculty, Bartın University, Bartın²Department of Biology/Science Faculty, Muğla Sıtkı Koçman University, Muğla
bbetul@mu.edu.tr

Aim of the study: Biodiversity is a whole that is formed by genes, species, ecosystems and ecologic events in a region. As a result of factors causing the loss of biodiversity (globalization and urbanisation, human population pressure, introduction of exotic species and new varieties, over-collecting, overgrazing, overexploiting, air-soil-water pollution, erosion, climate change, global warming, severe droughts, salinization, deforestation etc.), the number of endangered species has been increasing day by day. It has been reported that one third of existing plant species in the World is threatened.

Material and Methods: To protect endangered species, *in situ* and *ex situ* conservation strategies have been developed. One of the *ex situ* conservation methods is the micropropagation and the storage of the various parts of plant material in short-, medium- and long-terms by *in vitro* culture techniques.

Results: In this article, the use of *in vitro* culture techniques in protection of rare, endemic and/or endangered species and the studies in Turkey about the topic have been compiled.

Keywords: Biodiversity, conservation, *in vitro* culture, native species, Turkey