

**COMPARISON OF DOUBLE HAPLOID BARLEY (*Hordeum vulgare* L.)
LINES AND NATIVE CULTIVARS IN A SEMI-ARID ENVIRONMENT**

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ABSTRACT

A total of 310 double haploid barley lines with their parents and three native checks were compared in an augmented experimental design in the highland of the west Mediterranean region of Turkey in the 1993-94 growing season. In the following growing season, the selected lines were grown in a Randomised Complete Blocks design with 3 replications in order to compare them with three native cultivars. It was found that the heterogeneous landrace, Kılınç-B (white) performed better than the homozygous doubled-haploid lines in the semi-dry site. Generally, the early heading and taller genotypes were higher yielding than the late heading and shorter ones. Also, natural selection over years on landrace has resulted in the development of specific genes tolerating stress environments such as drought. So high yielding performance of the landrace, Kılınç-B (white), could be explained with this phenomenon.