

## ABSTRACT

### DETERMINATION OF INVADERS AND THEIR INVASIVENESS IN ANNUAL GRASSLANDS AND ROADSIDES

(AYDIN, DENİZLİ, MUĞLA, İZMİR)

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M.Sc. Thesis, Department of Biology  
Supervisor: Assist. Prof. Dr. Özkan EREN  
2013, 81 Pages

In this study, invasive plant species and their invasiveness which occur along roadsides and annual grasslands in the province of Aydın, Denizli, Muğla and İzmir separately quantified. Vegetation was sampled using 1 m<sup>2</sup> quadrat frames and within each frame all herbaceous species were identified and abundance was quantified as percent cover based on ocular estimates. A total of 200 plots were sampled. In annual grasslands, as a result of analyses of survey study, a total of 151 plant species belong to 26 different families were found and *Poaceae* and *Asteraceae* were defined as the most common families with a frequency of 19%. Along roadsides, a total of 266 plant species belong to 37 different families were detected and *Poaceae* was defined as the most common family with a frequency of 19%, followed by *Fabaceae* with a frequency of 17%. According to the data of survey, members of *Asteraceae* and *Fabaceae* families were more observed in plots which are sampled in especially disturbed annual grasslands can explain with their traits about being able to easily colonize and invade in disturbed lands. Results obtained from this study associated with invasion hypothesis (The Disturbance Hypothesis, The Species Richness Hypothesis, The Empty Niche Hypothesis) and annotated.

**Key Words:** Invasion biology, plant invasion, ruderal plants, annual grasslands, roadsides.