Geophysical Research Abstracts, Vol. 8, 01778, 2006 SRef-ID: 1607-7962/gra/EGU06-A-01778 © European Geosciences Union 2006



## The causes of land degradation and distribution of natural vegetation in Yunt mountain, in the Western Turkey

R. Efe

Department of Geography, Balikesir University

Balikesir 10100, Turkey

refe@balikesir.edu.tr

This paper aims to study the causes of land degradation and distribution of natural vegetation around Yunt Mountain in the Western Turkey. The factors which determine the distribution of natural vegetation in Yunt Mountain and its environs are climate, parent material, geomorphology, soil and human activity. But, today the human activity is the most important factor that determines the distribution of natural vegetation in the study area. Anthropogenic factors especially animal grazing and wood gathering for fuel determine the present distribution of the natural vegetation in Yunt Mountains.

In the course of historical periods human effect accelerated with the needs of increasing population. Progressive degradation of vegetation during the last few centuries is due to the impact of man and domestic animals. Over the centuries human activity reduced the vegetation consisting of dry forests and maquis. Large areas formerly occupied by oak and red pine forests were destroyed entirely due to human activities. This long continued degradation has created the typical maquis and garrigue formations in the places of pine forests. Return to equilibrium is slow and weak because of the summer drought which characterizes the Mediterranean climate which slows down or inhibits the colonization of bare soil, and which dries out a early as the and of spring. The climate is characterized by rains concentrated in winter and irregularity of rainfall favoured the erosion on bare land for long time and eroded soils are rarely favorable to the establishment of natural vegetation.

In order to determine the present situation of vegetation in the area the vegetation

analysis were made. Quadrate and transect methods were used. Transects were taken for determining the distribution of species in the west-east and south-north directions. The quadrates in different sizes were applied to find out the land cover and vegetation density.

Field studies undertaken in this region show a common pattern of change in natural vegetation due to human activities such as misuse of land, agricultural activities, animal grazing, tree cutting. Human agency, particularly pastoral herding, has a long history of impact on natural vegetation in the area. Uncultivated land is often used as natural pasture during the whole year because mild climate leads to non-stop over-grazing.

Thus climate combines with human activities as a mechanism to cause rapid and intense degradation of land and vegetation in the study area.