



University of Zabol

Graduate school

Faculty of Natural Resources

Range and Watershed management Department

**The Thesis Submitted for the Degree of M.Sc (in the field of Combat
Desertification Science)**

**Investigation of wilting causes in the
Haloxylon man- made forests in Ardestan
plain**

Supervisors:

Dr.A.R.Shahriari

Dr. A. Fakhire

Advisors:

Dr. N. Basirani

M. Tazeh

By:

A. keshavarz

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Abstract

About half of century ago, development activities were intensified by increasing population growth and for create expanding in the arid and desert area to cultivating trees and shrubs, especially *Haloxylon*. Very soon appeared to parallel expand of these forests, emerged in the older mass. In the city of Ardestan has been problematic again with the dejection of this mass the matter of dust and pollution on the environment. According to this, understanding the principle issues of *Haloxylon* wilt is an essential factor in management of *Haloxylon* mass. With this aim, this study was done within the area of 94.583 hectares, Sampling was done in three 1 hectare areas of lush half-withered and faded in three replications and studies of the geology, vegetation (density and age), climatology, pests and the underground water. In order to determine the effect of each factor obtained on dejection *Haloxylon*, was performed using factorial completely randomized block design analysis of variance and mean comparison. The results showed a huge, mass age, restrictions on soil pH, SAR and Ec, magnesium deficiency in the soil solution had significant difference. at 99% and sodium in the soil solution at 95% level. It seems the physiological conditions and compatibility *Haloxylon* species of soil values for these factors are tolerable and the elderly being the only factor that triggered the mass and a host of intense competition is the cause of dejection. Notable that the impact of ground water and climate are same on the vitality and dejection of mass.

Keywords: *Haloxylon*, causes wilt, hand planting, Ardestan.