

## **Abstract**

the main purpose of wood is cultivation success and proper growth and establishment of hand-planted trees and bushes. It has been accomplished wooding of Haloxy Ion ammodendron with different aims like reviving and improving natural resources, preventing from movement of flowing sands and etc, in most places in Iran for years. But, the woodings haven't been successful in many areas despite of great costs. This research aimed to create a pattern model of predicting kinds of herbaceous cultivations including- jungle, pasture and agricultural on Haloxy Ion ammodendron. In this survey, it was first specified the most important physical and chemical parameters effective on establishment and growth of the specices in natural in desert areas of Sistan and was identified patience and optimum ranges of the plant in terms of soil factors. Then, presenting a very simple fuzzy model, it was specified the succes of Haloxy Ion ammodendron wooding by a fuzzy valuating. Preparing center-finding maps numetical informational layers of soil parameters was accomplished using ARCSDM and Fuzzy operations and combining prepared fuzzy maps using joint ARCSDM to ARCMAP software. The fuzzy model represented that wooding in the studied area by Haloxy Ion ammondendron than growpoint conditions is successful from 30 to 70 percent.

**Keywords:** cultivation success, wood, Haloxy Ion Ammo Dendron, fuzzy model, ARCSDM



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**Evaluation of Afforestation Success with *Haloxylon aphyllum* Using Fuzzy  
Method (Case study: Hirmand City)**

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