

## Determination of Germination Parameters of Mangrove Forest in Koolghan, Tiab and Kolahi Areas in the Persian Gulf

Safa Eisini, Hengameh<sup>1\*</sup>; Kamrani, Ehsan<sup>2</sup>

1- M.Sc. of Environmental Management, Department of Environment of Hormozgan, Bandar Abbas, Iran. Email: safa1356\_i@yahoo.com

2- Associate Professor, Department of Marine Biology, Hormozgan University, Bandar Abbas, Iran. Email: eza47@yahoo.com

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\*Corresponding Author

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### Abstract

The Mangrove Forest in Koolghan, Tiab and Kolahi areas have been dispersed with extent of 1698.03 Hectare between latitude 27 ° 10' until 26° 52' of the North and Longitude 56 ° 23' until 56° 59' of the East; is one of the five Mangrove protected area in Hormozgan Province which is covered by net assemblies and non-coeval of *Avicennia marina* trees.

The studied mass with the aggregation of 1014.71 trees in Hectare with average height 190.41±77.56 centimeter with the average of bough diameter in collar place is equal to 10.51 ±11.03 centimeters. The average of height and crown diameter of trees also has been measured 151.74±77.93 and 230.74±153.07 centimeters, respectively. Also, the average level of tree's crown has been calculated as 6.01± 9.83 m<sup>2</sup>, the average of the number of air roots as 197.50±110.69 pieces in m<sup>2</sup> and the average height was determined 11.24 ±3.84 centimeters. Also, the number of fallen leaves of the bottom habitat was determined 119.34 pieces in m<sup>2</sup> with the average of 6.65±1.85 cm<sup>2</sup>. Statistical evaluations showed that between the studied transects, sample parts of Koolghan area in none of the studied parameters had significant differences and this habitat had been evaluated of homogeneous structure. In other sample parts of transects, they had significant differences in confidence level of 95% in parameters of tree height, crown height, crown diameter, crown level and bough diameter in collar place, but in parameters such as number of trees per area and covering percentage, there were not any differences that showed the total studied area is homogeneous.

Keywords: Grey mangrove, *Avicennia marina* trees, Determination of germination parameters, Independent variable, Hormozgan Province.

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