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Study on addaptation of bald cypress(*Taxodium distichum*)in relationship to variation of water table depth around lapoo marshlands(Mazandaran Province)

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Abstract

The objective of this study was to find out the effect of average depth of groundwater on the qualitative and quantitative characteristics of bald cypress(*Taxodium distichum*) at the margin of lapoo marshlands, in the northern province of Iran.

Experimental design was conducted by randomized complete block designs with four replications and four treatments within twelve years.

Differences between the average of the residual saplings(درصد ۸, درصد ۲۱, درصد ۶۵, درصد ۹۲) and the average of qualitative of saplings with various degrees (best, suitable, weak, unsuitable) in relationship with treatments(the average depth of ground water) were significant.

Differences between the average of the diameter of collar (192.5cm, 134.8cm, 34.7cm, 19.2cm), diameter at breast height(88.9cm, 61.4cm, 12.4cm, 7.2cm) and height of saplings(490.4cm, 353.4cm, 118.1cm, 91.5cm) in relationship with treatments(the average depth of ground water) were significant.

Comparison between the means of quantitative characteristics and the various degrees of qualitative (best, suitable, weak and not suitable) of bald cypress (*Taxodium distichum*) indicated, best place for planting is localities that the average depth of groundwater is 62 centimeter (minimum +23 cm, maximum -149.12cm). The other treatments average depth of groundwater 85cm, 97cm, 124cm were not suitable for planting of *Taxodium distichum*.

Key words: *Taxodium distichum*, Adaptation, Quantity, Quality, Mazandaran, Iran

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