(Pinus taeda)

()		(Loblolly pine)
		,
	, , , , , , , , , , , , , , , , , , , ,	:

(E-mail:bnkiani@hotmail.com)

11 : 11 :

...

.() .() () .() ,() (RGP) (RGP) .() рН

· _____

```
SAS
        )
()
                                                            Bc Bf Bcf Ct
(Root/Shoot)
                                                                                  ( R/S)
```

b b С В Bf Ct Вс Bcf ЩС bc С d .() Bf Bcf Œ а b С В Вс Bf Bcf Ct **III**" С В Вс Bf Bcf Ct bc bc bc С وزن خشك Bc Bcf Ct С В Bf () (RGP) ()

RGP

Taxodium disticum

.()

- Carlson Williams. C and D. Elaine Miller, . Target Seedling Root System Size H Ydrulic Conductivity And Water Use During Seeling Establishment.

-Colombo S.j and M.E. Asselstine. . Root Hydrulic Conductivity and Root Growth Capacity in Black Spruce (*Picea mariana*). Seedlings Tree Physiology , Heron Publishing , Victoria , Canada.

- Duryea M.L., . Nursery Cultural Practices Impacts on Seedling Quality Forest Mursery Mannual, Martinus Nijhoff/Dr. W. Junk publishers.U.S.A.

-Durey M.L and Thomas S.D. Landis : Forest Nurseries Manual , Production of Bareroot Seedlings. Martinus Nijhoff / Dr. W. junk Publishers. U.S.A.

- Hahn Philip F. The use of Styroblock and Containers for P+ Transplant Stock Production, Target Seedling Symposium: Proceedings, Combined Meeting of the Western Forest Nursery Associations. U.S.A.

- Mexal j.G, and T.D. Landis:

. Target Seedling Concepts, Height and Diameter, Target Seedling Symposium: Proceedings, Combined Meeting of the Western Forest Nursery Associations. U.S.A.

- Reilly Conor. o . Effect of root – Wrenching Treatments on the Physiology of Sitca Spruce Transplants. Final Research Reportts Coillte Teo.

- Ritchie Gary A, and Yasuomi Tanaka . Root Growth Potential and the Target Seedling.

(Pinus taeda)

- Savill Peters. and julian Evans. . Plantation Silviculture in Temperature Regions. Clarendon Press, Oxford , U.K.

- Simpson D.G et.al . Root Growth Capacity Effects on Field Performance in: proc Combinel Western Nursery Council Forest nursery Associations. Meeting . Atlanta Georgia.

Investigation of Root Growth Potential(RGP) in Bare Root and Container Seedlings of Loblolly Pine(*Pinus taeda*)

B. Kiani T. Rostami Shahraji F. Taheri

Abstract

Root growth potential(RGP) is the ability of a seedling to produce new roots (white roots) in a defined period and under defined conditions. *Pinus taeda* is one of the most important conifers, planted in Guilan province in an extensive scale. Therefore a study of its characteristics, specially RGP has a great positive effect on the production of its seedlings in nursery. The experimental design used is a complete randomized design(RCD) with treatments and replicates. Results indicated that a bare root seedlings under fertilizer treatment conditions had highest value for RGP. Container seedlings developed a greater amount of root and were superior in some other variables studied, but the root system was strongly twisted. Root pruning was demonstrated to have no significant effect on root growth potential.

Key words: Root growth potential(RGP), Pinus taeda, Bare root, Container seedling, Root pruning.

⁻Senior Expert of Forestry, Faculty of Natural Resources, University of Guilan (E-mail: bnkiani@hotmail.com)

⁻Assistant professor, Faculty of Natural Resources, University of Guilan

⁻Instructor, Faculty of Natural Resources, University of Guilan