



**4<sup>th</sup> National Congress on Medicinal Plants**  
**12, 13 May 2015**  
**Tehran- Iran**



1740

**INVESTIGATING THE OPTIMUM MAINTENANCE METHODS FOR  
 IRANIAN QUERCUS BRANTTII**

**Noghani, Zahra<sup>1</sup>; Palizdar, Maryam<sup>2</sup>; Yaghoubian, Azadeh<sup>3\*</sup>**

<sup>1</sup>*Research Institute of Forests and Rangelands, Tehran, Iran*

<sup>3</sup>*Department of Shahid Beheshti University, Tehran, Iran*

*Email: noghani@rift-ac.ir*

*Email : yaghoubian@yahoo.com*

Rejuvenescence of forests in western regions of country has been subjected to substantial problems due to frequent occupancy and abundant utilization of land. Hence, *Quercus branttii*, as one of the valuable medical plants which grow in the mentioned forests, must be thoroughly studied. Because the most common method, generally used for the reclamation of forests, may be considered to be dibber, it is necessary to pay special attention to the seed maintenance condition prior to planting. Therefore, the present research was conducted to evaluate the effects of seed maintenance condition as well as its time duration on the germination rate of Iranian *Quercus branttii*. This experiment was performed in a factorial design based on randomized complete blocks with four replications. In addition, seven different treatments were considered: the control treatment (seed planting right after the harvest), seed maintenance in moist sand at 2°C for 40, 60, and 90 days, as well as seed maintenance inside the pocket at 2°C for 40, 60, and 90 days. The results showed no statistically significant differences among the germination rates obtained under the three cases of seed maintenance in moist sand. However, the germination rates determined under the treatments of seed maintenance in moist sand were found to be statistically different from those obtained under the treatments of seed maintenance inside the pocket only for 60 and 90 days; while the difference for 40 days was resulted to be statistically insignificant.

### References

- [1] Alvaninejad, S., Tabari, M., Taghavaei, M., Espahbodi, K., and Hamzehpoor, M., **2008**. Iranian Journal of Forest and Poplar Research, *16* (4): 574-582
- [2] Basra, S.M., A.N. Ahmad, M.M. Khan, N. Iqbal & M. A. Cheema, **2003**
- [3]. Assessment of cotton seed deterioration during accelerated aging. Seed Sci. Technol. *31*: 531-540