

SEED GERMINATION OF THREE PROVENANCES OF *ARBUTUS ANDRACHNE* L. IN RESPONSE TO DIFFERENT PRETREATMENTS, TEMPERATURE AND LIGHT

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REFERENCES

- Bewley J. D., Black M. (1994). Seeds: Physiology of development and germination. Plenum Press, New York, 445 pp.
- Bonner F. T., Vozzo J. A., Elam W. W., Land S. B. (1994). Tree seed technology training course. USDA Forest Service GTR-SO-106. New Orleans, LA, 160 pp.
- Bradbeer J. W. (1988). Seed dormancy and germination. Blackie and Son Ltd. London, 146 pp.
- Cicek E., Tilki F. (2007). Seed germination of three *Ulmus* species from Turkey as influenced by temperature and light. *Journal of Environmental Biology*, 28: 423-425.
- Edwards D. G. W. (1980). Maturity and quality of tree seeds – a state-of-the-art review. *Seed Science and Technology*, 8: 625-657.
- Edwards D. G. W., El-Kassaby Y. A. (1996). The effect of stratification and artificial light on the germination of mountain hemlock seeds. *Seed Science and Technology*, 24: 225-235.
- Escudero A., Perez-Garcia F., Luzuriaga A. L. (2002). Effects of light, temperature and population variability on the germination of seven Spanish pines. *Seed Science Research*, 12: 261-271.
- Gosling P. G., Samuel Y. K., Jones S. K. (1995). A systematic examination of germination temperature, chipping and water temperature/soak duration treatments on the seeds of *Leucaena leucocephala*. *Seed Science and Technology*, 23: 521-532.
- Groot S. P. C., Karssen C. M. (1987). Gibberellins regulate seed germination in tomato by endosperm weakening: A study with gibberellin-deficient mutant. *Planta*, 171: 525-531.
- Hartmann H. T., Kester D. E., Davies F. T. (1990). Plant propagation: Principles and practices. Fifth edition, Prentice Hall, USA, 647 pp.
- Jull L. G., Blazich F. A. (2000). Seed germination of selected provenances of Atlantic white-cedar as influenced by stratification, temperature, and light. *HortScience*, 35: 132-135.
- Karam N. S., Al-Salem M. M. (2001). Breaking dormancy in *Arbutus andrachne* L. seeds by stratification and gibberellic acid. *Seed Science and Technology*, 29: 51-56.
- Kayacik H. (1982). The systematic of trees. I.U. Yayin No: 3013. Istanbul, 333 pp. (In Turkish).
- Kose H. (1998). Studies on the germination of some woody ornamental plants existing in Turkish flora. *Anadolu Journal of AARI*, 8: 55-65. (In Turkish).
- Leadem C. (1996). A guide to the biology and use of forest tree seeds. Land Management Handbook 30. Province of British Columbia. Victoria, BC, Canada, 21 pp.
- Msanga H. P., Maghembe J. A. (1986). Effect of hot water and chemical treatments on the germination of *A. schimperiana* seeds. *Forest Ecology and Management*, 17: 137-146.
- Phartyal S. S., Thapliyal R. C., Nayal J. S., Rawat M. M. S., Joshi G. (2003). The influences of temperatures on seed germination rate in Himalayan elm (*Ulmus wallichiana*). *Seed Science and Technology*, 31: 83-93.
- Roy D. F. (1974). *Arbutus menziesii* Pursh. In: Schopmeyer C. S. (Eds.). Seeds of Woody Plants in the United States. Agricultural Handbook 450. USDA Forest Service, Washington, DC: 226-227.
- Soyler D., Khawar K. M. (2006). Effects of prechilling, scarification, incubation temperature, photoperiod, KNO₃ and GA₃ treatments on germination of Caper (*Capparis ovata* Desf. var. *palaestina* Zoh.) seeds. *Propagation of Ornamental Plants*, 6: 159-164.
- Tigabu M., Oden P. C. (2001). Effect of scarification, gibberellic acid and temperature on seed germination of two multipurpose *Albizzia* species from Ethiopia. *Seed Science and Technology*, 29: 11-20.

- Tilki F. (2004). Improvement in seed germination of *Arbutus unedo* L. Pakistan Journal of Biological Sciences, 7: 1640-1642.
- Tilki F., Dirik H. (2007). Seed germination of three provenances of *Pinus brutia* (Ten.) as influenced by stratification, temperature and water stress. Journal of Environmental Biology, 28: 133-136.
- Yousheng C., Sziklai O. (1985). Preliminary study on the germination of *Toona sinensis* (A. Juss.) Roem. seed from eleven Chinese provenances. Forest Ecology and Management, 10: 269-281.
- Zar J. H. (1984). Biostatistical analysis. Prentice Hall, Englewood Cliffs. NJ, 718 pp.