

Comparative Analysis on Seed and Cutting propagation in *Cupressus arizonica*, *Cupressus sempervirens*, and *Thuja orientalis* : influence of seasonal climatic effects conditions

Ferjani Hanen^{1,2*} and Molka Balegi¹

¹Institut Supérieur Agronomique de Chott Mariem-Sousse. Tunisie

²L.R. Agrobiodiversité & Ecotoxicologie LR21AGR02,

Institut supérieur agronomique de Chott Mariem BP 47, 4042 Akouda. Sousse

*Corresponding author : fhanen375@gmail.com

Keywords: conifers, seedling, cutting, season impact.

Submitted 08/01/2026, Published online on 31st March 2026 in the [Journal of Animal and Plant Sciences \(J. Anim. Plant Sci.\) ISSN 2071–7024](#)

1 ABSTRACT

Various experiments on propagation through seeding and different types of cuttings, on different substrates, were conducted for three species of conifers: *Thuja orientalis* (Chinese thuja), *Cupressus sempervirens* (Common Cypress) and *Cupressus arizonica* (Arizona Cypress). The results demonstrate variability among the different species studied: the ex-situ germination rate ranges from 4% to 50%. Regarding in-situ germination, the study shows that germination of all species is higher in peat. Regarding cuttings performed on different substrate types and during two different periods (winter and spring), the results vary among the different species studied, with low rooting percentages, especially in *Cupressus arizonica*, which showed better rooting during the spring period