

In Vitro Propagation of *Viburnum treleasei* Gand., an Azorean Endemic with High Ornamental Interest

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Abstract. The purpose of our research was to establish a protocol for the in vitro culture of *Viburnum treleasei*, a rare and endangered taxon with high ornamental potential endemic to the Azores islands. The surface sterilization of the explants was better achieved with a pretreatment of 0.1% (w/v) Benomyl for 2 h followed by 0.2% (w/v) HgCl₂ for 10 min with agitation. Shoot tips were the most efficient explants for shoot development and single-node segments for proliferation. Woody plant medium (WPM) was adequate for all micropropagation stages. For culture establishment and shoot development, a hormone-free medium was adequate, whereas a 1.1 μM N6-benzyl adenine medium supplement was more efficient for shoot multiplication. Elongation and rooting could be carried out on a 1.3 μM 1-naphthaleneacetic acid-supplemented medium. Acclimatization of in vitro-produced plantlets was achieved after 1 month with a success rate of 50%. This in vitro propagation procedure will be useful for the conservation of *Viburnum treleasei* through production of morphologically true-to-type plants, allowing the recovery of depleted natural populations. Chemical names used: N6-benzyl adenine (BA); 1-naphthaleneacetic acid (NAA); HgCl₂ (mercury bichloride).

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