

P64.

Micropropagation of gorse (*Pterospartum tridentatum* (L.) Willk) – multiplication phase

Maria Teresa Coelho¹, José Gonçalves¹, M Diogo¹, M Canavarro¹, M Moldão³, V Alves³, M Seco¹

¹*Department of Life Science and Food Science, Portugal*

²*Department of Natural Resources and Sustainable Development, Escola Superior Agrária, Apartado 119, 6001-909 Castelo Branco, Portugal*

³*ISA. Technical University of Lisbon, Tapada da Ajuda, 1349-017 Lisboa, Portugal*

mteresacoelho@ipcb.pt

This work aimed to optimize the in vitro multiplication phase of the gorse (*Pterospartum tridentatum* (L.) Willk), a shrub distributed in the Iberian Peninsula, over the north and center, and also in North Africa, with high demand and use of different plant parts at the level of folk medicine and food, but also with ornamental. There were studied eight different culture media with different compositions at the level of growth regulators and macronutrients and three distinct geographical origins of the plant material. The best results with Orvalho material were performed on MS media supplemented with 1mg l^{-1} of BAP and the absence of IBA with 10.4 new shoots by explant with an elongation of 6.4 cm and a multiplication rate of secondary explants of 43.9. For the material Malcata and Gardunha the presence of IBA 0.5 mg l^{-1} proved to be favorable to shoot development. The reduction of nitrates does not appear to have significant influence on various parameters. The results have revealed that these conditions are sufficient for high multiplication rates that can ensure a multiplication system cost effective for this species.