

Somatic embryogenesis in explants of adult wild olive trees

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In this investigation, somatic embryogenesis in explants of adult wild olive trees, using the protocol developed by Mazri et al. (2013, Sci. Hort. 159: 88-95), was induced. Four genotypes differing in the level of resistance to the fungal pathogen *Verticillium dahliae* were used: Ac18, StopVert and OutVert (symptomless resistant genotypes, Jiménez-Fernández et al. 2015, Plant Pathology, in press) and Ac15 (susceptible genotype, Jiménez-Díaz, IAS-CSIC, Córdoba, personal communication). Three types of explants from actively growing cultures were used: first pair of leaves, petioles and shoot apex. Firstly, all explants were cultured on a liquid induction medium with MS mineral elements at 0.5X and 30 µM TDZ-0.5 µM NAA, for 4 days at 80rpm. Afterwards, explants were transferred to basal MS with 0.5X macroelements, for 8 weeks. Finally, calli were cultured on expression ECO medium supplemented with 0.25 µM IBA, 0.5 µM 2ip and 0.44 µM BA, for several subcultures. Cultures were incubated under darkness at 25 degrees. Embryogenic calli were observed on shoot apex (StopVert) or leaf primordia (Ac18) explants.

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