

## Genetic Transformation of *V. vinifera* - Two Alternative Systems under Evaluation

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### Abstract

'Trincadeira' and 'Aragonez' are two of the most important *Vitis vinifera* L. cultivars used for red wine production in Portugal. Aiming to obtain a reproducible system for plant genetic transformation, the techniques of particle bombardment and transformation mediated by *Agrobacterium tumefaciens* were tested. In both systems putative transformed embryos were selected by continued proliferation on an in vitro medium containing 40 mg/L of kanamycin. One week after co-culture the embryogenic calli produced the first somatic embryos and four months later plantlets were regenerated from *A. tumefaciens* transformed calli. Results suggest this method as the most appropriate to transform embryogenic calli of both cultivars.

### INTRODUCTION