Induction of somatic embryogenesis as an example of stress-related plant reactions

Maria Amely Zavattieri*

Laboratory of Plant Breeding and Biotechnology Institute of Mediterranean Agricultural and Environmental Sciences University of Évora Évora, Portugal

E-mail: zavattieri@uevora.pt

António Miguel Frederico

EU Marie Curie Chair Institute of Mediterranean Agricultural and Environmental Sciences University of Évora Évora, Portugal

Mónica Lima

Laboratory of Plant Breeding and Biotechnology Institute of Mediterranean Agricultural and Environmental Sciences University of Évora Évora, Portugal

Rui Sabino

Institute of Mediterranean Agricultural and Environmental Sciences University of Évora Évora, Portugal

Birgit Arnholdt-Schmitt

EU Marie Curie Chair Institute of Mediterranean Agricultural and Environmental Sciences University of Évora Évora, Portugal

In this review, we address the role of stress as one of the principal causes for a cell or tissue to change its preexisting somatic program, reprogramming itself to express the embryogenic pathway. The focus of this paper is the effect of different stress conditions on the induction phase of plant somatic embryogenesis, as well as the development of embryogenic competence as a result of the applied stresses. We also present a variety of data that link plant somatic embryogenesis, DNA methylation and oxidative stress response.

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