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Authors: Liliana Lalaleo, Pilar Testillano, Maria-Carmen Risueño, Rosa M. Cusidó, Javier Palazon, Ruben Alcazar, Mercedes Bonfill



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Effect of in vitro morphogenesis on the production of podophyllotoxin derivatives in callus cultures of *Linum album*

Liliana Lalaleo¹; Pilar Testillano²; Maria-Carmen Risueño²; Rosa M. Cusidó¹; Javier Palazon¹; Ruben Alcazar¹; Mercedes Bonfill*¹.

¹Sección de Fisiología Vegetal, Facultad de Farmacia, Universidad de Barcelona, E-08028 Barcelona, Spain.

²Centro de Investigaciones Biológicas. Consejo Superior de Investigaciones Científicas (CSIC). 28040 Madrid. Spain.

*Corresponding author: M. Bonfill. E-mail address: mbonfill@ub.edu Tel: +34 934020267

Abstract:

The anticancer compound podophyllotoxin and other related lignans can be produced in *Linum album* *in vitro* cultures, although their biosynthesis varies according to the degree of differentiation of the plant material. In general, *L.album* cell cultures do not form the same lignans as roots or other culture systems. Our aim was to explore how the lignan-producing capacity of organogenic cell masses is affected by the conditions that promote their formation and growth. Thus, *L.album* biomass obtained from plantlets was cultured in darkness or light, with or without the addition of plant growth regulators, and the levels of podophyllotoxin, methoxypodophyllotoxin and other

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