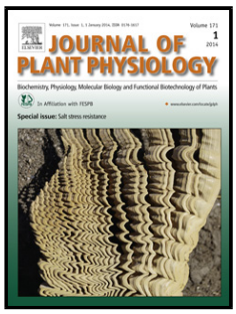

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Effect of in vitro morphogenesis on the production of podophyllotoxin derivatives in callus cultures of Linum album

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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